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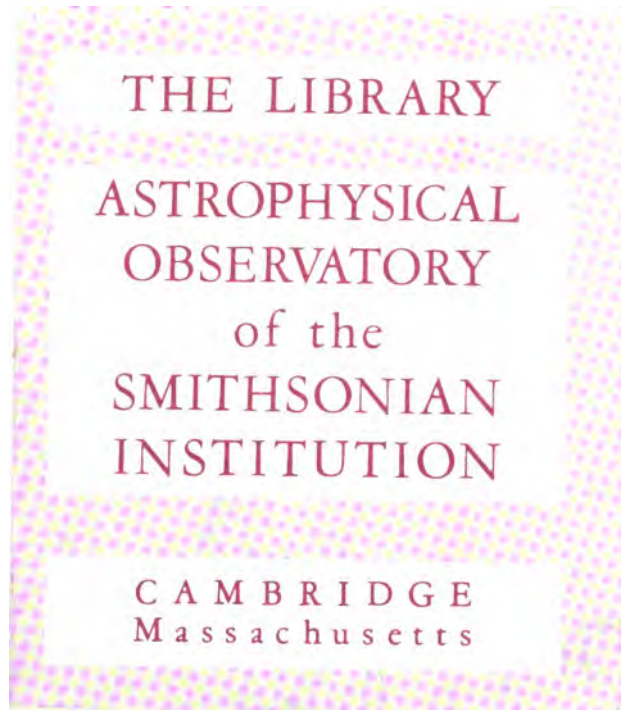
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ANNALS
OF
THE ASTRONOMICAL OBSERVATORY OF HARVARD COLLEGE

VOLUME 92

THE HENRY DRAPER CATALOGUE

4^h, 5^h, AND 6^h

BY
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PREFACE.

VOLUME 92 is a continuation of H.A. 91, and gives the class of spectrum and magnitude of 27,681 stars in four, five, and six hours of right ascension. The form of the Catalogue is the same in both volumes and accordingly it has been found convenient to repeat the Introduction, pages 1 to 14, with a few slight changes. Stars H. D. 25701 to 25763 are repeated from H.A. 91, in order that the numbering may be continuous, and according to the same system.

As the entire work has been maintained by Mrs. Henry Draper as a Memorial to her husband, his portrait is inserted here in the Frontispiece.

EDWARD C. PICKERING,
Director of the Observatory of Harvard College.

CAMBRIDGE, U.S., October 8, 1918.

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THE HENRY DRAPER CATALOGUE.

THE Henry Draper Catalogue originated in the attempt to collect in a single catalogue a description of all the stellar spectra which could be classified on the photographs of the Henry Draper Memorial. It was shown in May, 1885, that by placing a prism in front of the objective of a photographic telescope, excellent spectra could be obtained of all the stars of sufficient brightness in the field of the instrument. The immediate effect was that the photographic image of each star, instead of appearing as a point, was spread into a line, the rays of different wave lengths being diverted by the prism to different points upon the plate. These lines were then broadened into bands by giving a rate to the driving clock differing slightly from sidereal time. The principal lines in the spectra appear in these bands. The advantages of this method are, first, that the spectra of several hundred stars can be obtained on a single photograph, while with a slit spectroscope only one star can be photographed at a time. Secondly, the loss of light is so small that, even if stars are faint, satisfactory spectra can be obtained. Thirdly, the spectra can be identified with certainty, since they occupy the same relative positions on the photographs as stars on a chart plate, or map.

The classification of the spectra required for the Henry Draper Catalogue was begun by Miss Annie J. Cannon on October 2, 1911, and practically completed September 30, 1915. Some additional spectra were taken from later plates, where faint stars had not been classified previously. The total number of spectra classified is 242,093, relating to about 222,000 stars. The greater portion of the northern stars were classified from 709 plates taken with the 8-inch Draper Telescope, mounted at Cambridge. In like manner, 1,409 plates of the southern stars were used, taken with the Bache Telescope, mounted at Arequipa, Peru. Each of these instruments has, for an objective, an 8-inch Voigtländer Portrait Lens, corrected by Alvan Clark and Sons. Two prisms having angles of 13° and 5° were originally used with each instrument. They formed spectra having a dispersion such that for the 8-inch Draper Telescope the intervals between the lines $H\beta$ and $H\epsilon$ were 5.61 and 1.60 mm., respectively.

The corresponding intervals for the Bache Telescope were 5.80 and 2.23 mm. It appeared that the definition was better with the prism giving the larger dispersion attached to the 8-inch Draper Telescope, and with the prism giving the smaller dispersion attached to the Bache Telescope. For this reason, the spectra of much fainter stars could be classified from the photographs taken in Arequipa, than from those taken in Cambridge. Exceptions were made in the case of southern stars which are too dense on plates of small dispersion, and of northern stars so near together that their spectra are superposed on plates of long dispersion. Some northern stars between 0° and $+10^{\circ}$ in declination were also classified from plates of short dispersion taken in Arequipa.

In November, 1900, two prisms, having nearly equal angles of about 6° , were attached to the 8-inch Draper Telescope. They were mounted so that they could be rotated by any desired amount, which was measured by means of a graduated circle. When placed in opposite directions they nearly neutralized each other, while, when turned in the same direction, the dispersion was double that of one of the prisms. The angles adopted were such that the dispersions were the same as those previously employed, 5.61 and 1.60 mm.

A number of photographs showing fainter stars were taken with the 16-inch Metcalf Telescope. The regions selected were the centres of the Harvard Standard Regions described in H.A. 14, 477, and a few others, such as the Pleiades, Praesepe, etc. The distance between the lines $H\beta$ and $H\epsilon$ was here 3.90 mm.

On all of the plates described above, the spectra of the bright stars were dense, so that they could not be classified. Accordingly, spectra taken with a larger dispersion were used. For stars north of declination -20° , from one to four prisms were attached to the 11-inch Draper Telescope. The interval between the lines $H\beta$ and $H\epsilon$ varied from 19.63 to 80.50 mm. These spectra have already been described in H.A. 28, Part 1, but as a different system of classification was there employed by Miss Maury, the spectra were again classified by Miss Cannon. This work was extended to stars of the fifth magnitude, and a few that were fainter, by means of H.A. 56, No. 4. For the southern stars, brighter than the sixth magnitude, the spectra are taken from H.A. 28, Part 2, and H.A. 56, No. 5. From one to three prisms were employed, and the interval from $H\beta$ to $H\epsilon$ varied from 21.57 to 72.15 mm.

From August, 1885, to November, 1894, Seed 26+, from December, 1894, to December, 1899, Cramer Crown, from January, 1900, to May, 1911, Seed G. E. 27, and since June, 1911, Hammer Special plates were generally used.

Substantially the same classification has been used in all the publications of the Henry Draper Memorial, except in the case of H.A. 28, Part 1. Slight changes have

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been introduced from time to time as experience showed that the classification could be improved. For instance, Class H, used in H.A. 27, has been abandoned, since it has been found that it is identical with Class K, when photographed under favorable conditions. The letters were originally applied empirically, a separate letter for each class of spectrum which appeared to be different. Later, it was found that nearly all the spectra fell into the classes B, A, F, G, K, and M, which thus formed a continuous sequence. Intermediate spectra are indicated by numbers representing tenths of the interval. Thus, A₅ represents a spectrum midway between A₀ and F₀. The numeral is omitted when a precise classification cannot be made. Class B was found to precede A, but the letters could not be reversed without causing confusion. Class P, designating gaseous nebulae, and Class O, stars of the fifth type, appear to precede Class B. The unanimous adoption of this system by an International Committee appointed by the Solar Union has secured its universal acceptance. The countries represented on this Committee were Canada, England, France, Germany, Holland, and the United States.

The designations of the lines used in describing the spectra, are generally the same as in the previous volumes. An exception is made, however, in the case of the series of lines first found in the spectrum of ζ Puppis. Professor Pickering showed these lines to be so closely represented by a modification of Balmer's formula, that he assumed them to be due to "hydrogen under conditions of temperature or pressure yet unknown," as stated in H. C. 16, January 12, 1897. The lines were therefore called "additional hydrogen lines," with the specific designations as follows: line 5411, H β' ; 4541.9, H γ' ; 4200.3, H δ' ; 4026.0, H ϵ' ; 3924.0, H ζ' ; 3860.2, H η' ; 3815.7, H θ' ; 3783.4, ι' . Recent investigators, however, find by experiments in the laboratory that these lines are probably due to helium. They are now commonly called ζ Puppis lines and this designation is accordingly adopted here.

The classification and designation of peculiar spectra present great difficulties. Some spectra are so peculiar that they can not be assigned to any known class, and are marked Pec. in Table I. Others show deviations of various kinds and degrees, and yet resemble the typical spectra in the most essential characteristics. In the latter case, the class which the peculiar spectrum resembles most nearly is given, followed by the letter p. A description of the deviation from the typical spectrum will then be found in the Remarks following Table I. The deviations may occur in several ways, as has already been discussed in H.A. 28, 143. First, in the width of the lines. The difference in the width of the lines, especially whether the lines are diffuse or sharp, was early recognized. On September 8, 1887, the spectra of α Cygni, in which the lines are very sharp, and of α Aquilae, in which they are diffuse, were

photographed on the same plate, to prove that the difference was due to the star and not to the instrument, or condition of the air. Narrow lines will appear hazy, or even double, if the focus is poor, or the air unsteady, and a slit spectroscope is much to be preferred to an objective prism for determining this condition. Whenever the width of the lines appeared to be abnormal, it is noted in the Remarks. With the larger dispersion in H.A. 28 and 56, the deviation from the normal in the width of the lines was always noted, when certainly seen. When the lines are broad, the spectra are designated in H.A. 28, 1, by the letter "b," and in H.A. 28, 2, by Remark 18. When narrow, by the letter "c" and Remark 40, respectively. For convenience of reference, a list of bright stars in whose spectra the lines are narrow, was given in H.A. 56, 162.

Secondly, deviations may occur in the intensity of certain lines in stellar spectra. Numerous spectra in Classes A₀ to A₅, show the double silicon line, 4128.1, 4131.1 to be of increased intensity, and in other spectra the strontium lines 4077.9, 4215.7 are very strong. Lists of a few of these peculiar spectra are given in H.A. 56, 113, 161. The great intensity of these strontium lines in spectra of various classes, such as δ Microscopii of Class A₂, ξ Phoenicis of Class F₀, and ζ Capricorni of Class G₅, is of interest in connection with the relation of these lines to the absolute brightness of the stars, and to the possibility of distinguishing between the so-called "giants" and "dwarfs." Numerous other lines, including those of hydrogen, have also been found to be of abnormal intensity in certain spectra. In the case of C.D.M. $-27^{\circ} 178$, R. A. $\alpha^h 31^m.7$, Dec. $-27^{\circ} 50'$, the continuous spectrum is Class G₅, but the hydrogen lines are as strong as in Class F₅. In some spectra of Class K₅, or Ma, such as B.D. $+50^{\circ} 1725$, R. A. $10^h 5^m.3$, Dec. $+49^{\circ} 58'$, and C.D.M. $-39^{\circ} 14192$, R. A. $21^h 11^m.5$, Dec. $-39^{\circ} 15'$, several lines, including 4435 and 4455, are abnormally intense.

A third peculiarity in stellar spectra is the presence of bright, or emission, lines. At least 750 spectra are known to have bright lines. The gaseous nebulae, Class P, the Fifth Type, Class O, the P Cygni Type, and the Novae are discussed in H.A. 76, No. 3. The presence of bright lines in spectra of Class M, characteristic of long period variables, is indicated by the combination, Md. No symbol has ever been adopted to show the presence of bright lines in spectra of Class B, although the use of a suffix, such as " β " or "h," has been suggested. It seemed best, however, to continue to designate these spectra by placing the letter "p" after the class, until some definite action should be taken by the Committee on Stellar Classification. These spectra may easily be found by means of the Remarks following Table I.

The other two deviations consist in a periodic doubling of the lines in the spectrum, also indicated by the letter "p," and in the existence of the lines of two

classes of spectra completely superposed, designated composite spectra. A large part of the bright stars having composite spectra are known to be double, either visually or spectroscopically. It is assumed that this is always the case, and two lines are accordingly given to such stars.

Miss Cannon has described the classification in full in H.A. 28, 146, and more concisely in H.A. 56, 66. A classification of the gaseous nebulae is given in H.A. 76, 20. For convenience, the classification as used in the present volume is again given below.

Class Pa. Typical nebula, I.C. 418, R. A. $5^h 22^m.8$, Dec. $-12^\circ 46'$. The double line, 3726, 3729, is more conspicuous than the chief nebular lines, 5007.0 and 4959.0. The hydrogen lines $H\alpha$, $H\beta$, $H\gamma$, $H\delta$, $H\epsilon$, and $H\zeta$ are bright.

Class Pb. Typical nebula, The Great Nebula of Orion. Lines 5007.0 and 4959.0 are more intense than in Class Pa.

Class Pc. Typical nebula, I.C. 4997, R. A. $20^h 15^m.6$, Dec. $+16^\circ 25'$. Line 4363.4 is the most conspicuous. Novae usually show this line much stronger than 5007.0 when they first become nebulae.

Class Pd. Typical nebulae, N.G.C. 6826, R. A. $19^h 42^m.1$, Dec. $+50^\circ 17'$, and N.G.C. 6326, R. A. $17^h 12^m.9$, Dec. $-51^\circ 40'$. The chief nebular line, 5007.0, is the strongest line. The greater portion of the gaseous nebulae belong to this and the following class.

Class Pe. Typical nebulae, N.G.C. 7662, R. A. $23^h 21^m.1$, $+41^\circ 59'$, and N.G.C. 7009, R. A. $20^h 58^m.7$, Dec. $-11^\circ 46'$. This class differs from Class Pd in having line 4685.9 present.

Class Pf. Typical nebula, N.G.C. 40, R. A. $0^h 7^m.6$, Dec. $+71^\circ 32'$. A bright band whose centre is at 4650 is the most conspicuous portion of this spectrum and appears to ally it with spectra of Class O.

Class Oa. Typical stars, B.D. $+35^\circ 4013$, R. A. $20^h 8^m.2$, Dec. $+35^\circ 54'$, and C.P.D. $-60^\circ 2578$, R. A. $11^h 5^m.8$, Dec. $-60^\circ 26'$. A broad bright band, whose centre is at 4650, is the most conspicuous portion of these spectra. $H\gamma$ and $H\delta$ are bright, and several other bright bands are seen.

Class Ob. Typical stars, B.D. $+35^\circ 4001$, R. A. $20^h 6^m.5$, Dec. $+35^\circ 53$, and C.D.M. $-23^\circ 4553$, R. A. $6^h 50^m.0$, Dec. $-23^\circ 48'$. A wide, bright band, whose centre is at the wave length 4686, is the most characteristic feature of these spectra. The hydrogen lines $H\beta$, $H\gamma$, and $H\delta$ are bright, and also those of the ζ Puppis series.

Class Oc. Typical stars, B.D. $+36^\circ 3987$, R. A. $20^h 13^m.3$, Dec. $+37^\circ 7'$ and C.D.M. $-41^\circ 10972$, R. A. $16^h 45^m.3$, Dec. $-41^\circ 41'$. The bands are narrower than in

Classes Oa and Ob, and two well separated lines are seen at 4686 and 4638, the former being twice as bright as the latter. The hydrogen lines are bright, and also the lines of the ζ Puppis series. No dark lines are seen.

Class Od. Typical stars, ζ Puppis and λ Cephei. All lines are dark except 4686 and 4638, which are bright. Seven dark lines of the ζ Puppis series have been photographed. The helium line, 4471.6, is present but very faint in ζ Puppis. Several faint dark lines between $H\beta$ and $H\gamma$ are seen in the spectrum of λ Cephei, but not in that of ζ Puppis.

Class Oe. Typical star, 29 Canis Majoris, R. A. $7^h 14^m.5$, Dec. $-24^\circ 23'$. The spectrum resembles that of ζ Puppis in having all lines dark except 4686 and 4638. Numerous helium and other dark lines are present. Line 4097.5, sometimes attributed to silicon, and the silicon line, 4089.0 are at their maximum intensity.

Class Oe5. Typical star, τ Canis Majoris, R. A. $7^h 14^m.5$, Dec. $-24^\circ 47'$. All the lines are dark. This spectrum is clearly intermediate between those of Classes Oe and Bo. It resembles those of Class Oe in the presence and intensity of the ζ Puppis series, and those of Class Bo with respect to the helium lines. No bright bands are seen, but the strong dark lines 4649.3 and 4685.9 are present.

Class Bo. Typical star, ϵ Orionis. The hydrogen lines are 0.3 as intense as in the spectrum of α Canis Majoris. The ζ Puppis series is present, but much fainter than in Class Oe5. Oxygen lines are strong. Line 4649.3 is slightly more intense than the helium lines 4026.3 and 4471.6, which are equally strong. The triplet, 4070.0, 4072.5, and 4076.1, is well marked. Lines 4649.3, 4116.3 and 4089.0, reach their greatest intensity in this class and decrease very rapidly in succeeding classes of spectra.

Class B1. Typical stars, β Canis Majoris and β Centauri. The hydrogen lines are seen from $H\beta$ to $H\gamma$. The ζ Puppis series is not distinctly seen. The lines of helium are more intense while the silicon and oxygen lines are fainter than in Class Bo. Line 4471.6 exceeds 4649.3, while 4121.0 exceeds 4116.3, in intensity.

Class B2. Typical stars, γ Orionis and α Lupi. The lines of helium are at their maximum intensity in this and the following class. Line 4116.3 is not seen, and lines 4089.0 and 4649.3 are faint.

Class B3. Typical stars, π^4 Orionis and α Pavonis. The hydrogen lines are about 0.5 as intense as in α Canis Majoris. The helium lines, while not stronger than in Class B2, are more prominent, due to the disappearance or extreme faintness of the lines, 4070.0, 4072.5, 4076.1, 4089.0, 4116.3 and 4649.3. Helium lines having the greatest intensities are 3819.8, 4009.4, 4026.3, 4143.9, 4388.1, 4471.6, and 4922.1.

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Class B5. Typical stars, η Tauri and ϕ Velorum. These spectra show an advance towards Class Ao in the increased intensity of the calcium line, K, and of the double silicon line 4128.1, 4131.1, which is stronger than the helium line 4121.0, and fainter than 4143.9. Line 4481.3 is 0.7 as intense as 4471.6.

Class B8. Typical stars, β Persei and γ Gruis. The helium lines 4026.3 and 4471.6 are present, together with several lines prominent in the spectra of Class Ao. Lines 4471.6 and 4481.3 are approximately equal. Line K is less intense than 4026.3.

Class B9. Typical stars, λ Aquilae and λ Centauri. The spectrum is nearly like that of Class Ao, except that 4026.3 is seen and the line K is somewhat fainter than in Class Ao.

Class Ao. Typical star, α Canis Majoris. The hydrogen lines are at their maximum intensity, and line K is 0.1 as intense as H δ , or less. On plates having sufficient dispersion, the calcium line H, at 3968.6, is separated from H ϵ , 3970.3, and is nearly as intense as line K. Line 4481.3 is the strongest except the hydrogen lines and line K. On a photograph taken with the 13-inch Boyden Telescope, with the dispersion of three prisms, 93 solar lines were measured.

Class A2. Typical stars, δ Ursae Majoris and ι Centauri. The line K is 0.3 or 0.5 as intense as H δ . Solar lines are well marked, especially lines 4481.3, 4226.9, and 4233.8. The two latter form a nearly equal pair. No helium lines are seen in this, or any following class.

Class A3. Typical stars, α Piscis Austrini, and τ^3 Eridani. The line K is more than 0.5 as intense as the compound line H and H ϵ , and is 0.8 as intense as H δ . The metallic lines are more numerous and more intense than in Class A2, while the hydrogen lines are slightly fainter.

Class A5. Typical stars, β Trianguli and α Pictoris. The line K is 0.9 as intense as the compound line H and H ϵ , and more intense than H δ . Line 4481.3 is no longer the most conspicuous among the solar lines. Lines 4299.4, 4300.7, and 4302.7 are well marked.

Class Fo. Typical stars, δ Geminorum and α Carinae. The lines of hydrogen are about 0.5 as intense as in α Canis Majoris. The line K is as strong as the compound line H and H ϵ , and about 3.0 as intense as H δ . The lines 4305.6, 4308.0, and 4309.5 and other lines which form the absorption band called G by Fraunhofer, are faint and inconspicuous.

Class F2. Typical star, π Sagittarii. This spectrum resembles Class Fo, except that there is more appearance of continuity in the band G, due to increased strength of lines 4305.6 to 4315.2.

Class F5. Typical stars, α Canis Minoris and ρ Puppis. The hydrogen lines are 2.0 as intense as in the Sun, and metallic lines are fainter and less numerous. Line 4325.9 is about 0.1 as strong as $H\gamma$. On plates with small dispersion, the Fraunhofer band G appears to be nearly continuous from 4299.4 to 4315.2. The compound line 4308.0 and 4309.5 is more intense than 4315.2. Line 4226.9 is well marked among the numerous lines, but is not 0.5 as strong as $H\gamma$.

Class F8. Typical stars, β Virginis and α Fornacis. The spectrum resembles that of the Sun, except that the hydrogen lines are stronger, and a few of the metallic lines are fainter.

Class G0. Typical stars, α Aurigae and β Hydri. The spectrum closely resembles that of the Sun. The hydrogen lines are no longer conspicuous as a series of lines. $H\gamma$ is 1.5 as intense as 4325.9, and 3.0 as intense as the adjacent line, 4337.7, when the dispersion is sufficient to show the two lines separately. The lines 4076.8 to 4077.9, $H\delta$, and 4226.9 are nearly equal in intensity. The band G is continuous on photographs taken with one or two prisms. The continuous spectrum shows no very marked changes in the distribution of light, from $H\beta$ to $H\epsilon$, although there is a slight gradual decrease from $H\gamma$ to $H\epsilon$. The bands H and K are very conspicuous.

Class G5. Typical stars, κ Geminorum and α Reticuli. The hydrogen lines are slightly fainter than in Class G0. $H\gamma$ when combined with 4337.7 is equal to 4325.9; when separated, $H\gamma$ is fainter than 4325.9. Several spaces appear brighter than adjacent portions, and in the distribution of light there is a decided advance towards Class K0.

Class K0. Typical stars, α Bootis and α Phoenicis. The hydrogen lines are fainter than in Class G5 and the light of the continuous spectrum shows a decided decrease from $H\gamma$ to $H\epsilon$. $H\gamma$ is about 0.5 as strong as 4325.9. Line 4226.9 is 3.0 as intense as in Class G0. Bands H and K reach their greatest intensity. Line 4226.9 is 2.0 as intense as the compound line 4172 and nearly 3.0 as intense as lines 4383 to 4385. The band G, extending from 4299 to 4315 is continuous and is more conspicuous than line 4226.9. Several portions appear brighter than adjacent parts, such as from 4077.9 to $H\delta$, 4215.7 to 4226.9, 4470 to 4525 and 4614 to 4648, approximately.

Class K2. Typical stars, β Cancri and ν Librae. The spectrum resembles Class K5 in the increased intensities of several lines, as 4226.9, and a general faintness of the continuous portion towards the end of shorter wave length. The band G is still continuous.

Class K5. Typical star, α Tauri. The bands H and K and line 4226.9 are the most conspicuous absorption lines. The band G is no longer continuous, owing to

the disappearance of several of the fainter lines. The double lines 4383 to 4385 and 4405 to 4408, form a conspicuous pair, of which the one of shorter wave length is somewhat stronger. Faint breaks in the light are seen at the wave lengths 4762, 4954, and 5168, which are the beginning of the absorption bands of Class M. There is also a sudden diminution in light at $H\beta$, which is nearly as well marked as the similar change at 4762.

Class Ma. Typical stars, α Orionis and γ Hydri. The spectrum is banded. The bands extending from 4762 to 4954 and from 5168 to 5445 are well marked. The change in light at $H\beta$ is much less conspicuous than at 4762. Several bright spaces are seen, such as from 4556 to 4586, and from 4657 to 4668. The lines of the G band are well separated, and line 4315.2 is very faint. Line 4226.9 is the most conspicuous absorption line. The spectrum is faint towards the end of greater wave length, so that bands H and K are generally barely seen.

Class Mb. Typical stars, ρ Persei and γ Gruis. The edges of the absorption bands, at wave lengths 4762, 4954, 5168, and 5445 are strong and appear somewhat like bright bands. These bands fade gradually towards the edge of shorter wave length. Line 4226.9 is very wide and sometimes appears to be as intense as $H\delta$ in the spectrum of α Canis Majoris. Conspicuous bright bands of equal intensity are seen from 4556 to 4586 and from 4614 to 4626. Lines 4299.4, 4300.7, and the compound line 4305.6, 4308.0 and 4309.5 are the only well marked lines remaining of the band G. On isochromatic plates, absorption bands are also seen having edges at the wave lengths 5763, 5816, and 5857, approximately.

Class Mc. Typical stars, W Cygni and RX Aquarii. The continuous spectrum is fainter, and the bright edged bands are stronger, than in Classes Ma and Mb, so that the spectrum appears to be of a fluted character, and on plates of small dispersion many of the dark lines seem to have disappeared.

Class Md. Typical stars, χ Cygni and σ Ceti. This designation is used for spectra of any division of Class M, in which at least one hydrogen line is bright. The greater portion of the variable stars of long period have this class of spectrum. The spectra differ widely. Either $H\beta$, $H\gamma$, or $H\delta$ may be the strongest bright line, while the underlying spectrum may belong to Class Ma, Mb, or Mc. The subject is further complicated by changes in the relative intensity of the hydrogen lines and probably in the class of spectrum, connected with the variation in the light of the star. As an example, the spectrum of 154615, R Serpentis, may be cited. On April 25, 1912, the bright line, $H\delta$, was seven times as intense as $H\gamma$, while on April 18, 1914, the two lines were of nearly the same intensity. On the first date, the star was of the ninth magnitude, and the phase was 40 days before maximum. On the

second date, the star was at maximum light, about the sixth magnitude. It is evident that no accurate subdivision of these spectra can be made until observations have been obtained at different points on the light curve. It has therefore seemed best to use the designation Md without numeral, in Table I, and to give additional facts, such as the intensities of the bright hydrogen lines, assuming $H\gamma$ to be equal to 10, in the Remarks. Several spectra which have hitherto been called Md₁, or Md₂ in which $H\beta$ is the strongest bright line, are found to be peculiar and are designated Pec. in Table I. The variable stars R Andromedae, U Cassiopeiae, S Cassiopeiae, R Lyncis, R Canis Minoris, T Geminorum, and R Cygni may be given as examples. These spectra do not show the titanium bands having bright edges at 4762, 4954, and 5168 as in all divisions of Class M, but more nearly resemble the spectrum of π^1 Gruis, which may be placed in a subdivision of Class R, assuming some peculiarities.

Class R. This letter was assigned in 1908, to a few spectra which on photographs of small dispersion, resemble those of Class N between $H\beta$ and $H\gamma$, but which contain so much blue light that the spectrum is visible as far as the calcium bands, H and K. A list of spectra assigned at that time to Class R is given in H. C. 145. A careful study of these spectra shows that they may be subdivided into at least three classes, which are described below.

Class Ro. Typical star, S.D. $-10^\circ 5057$, ptm. magn. 7.04, R. A. $19^h 17^m.6$, Dec. $-10^\circ 54'$. The distribution of light resembles that in Class G5 or Ko, and the absorption bands H and K, are well seen. The dark carbon band at 4700 is wide and strong, and the dark band 4395 is about equal to Fraunhofer's G band. Lines 4226.9, 4233.8, 4236.1, and 4239.0 are well marked, and on photographs having small dispersion the appearance at this region is that of a wide, continuous band of absorption. Some spectra have been found during observations for this catalogue, which may be considered to be intermediate between the spectra of Classes K and Ro. One of the best examples is the spectrum of the star S.D. $-19^\circ 3634$, ptm. magn. 8.7, R. A. $13^h 1^m.1$, Dec. $-19^\circ 31'$. This spectrum contains the wide band of absorption near 4227 as in Class Ro, and a fainter band at 4700. Other peculiar spectra of Class K show the same bands in more or less marked degree, as stated in the Remarks.

Class R3. Typical star, B.D. $+5^\circ 5223$, ptm. magn. 8.8, R. A. $23^h 44^m.0$, Dec. $+5^\circ 50'$. The H and K bands of calcium are visible, but they are fainter than in Class Ro, and the continuous spectrum between these bands and $H\gamma$ is not more than 0.5 as intense as in Class Ro.

Class R5. Typical star, S.D. $-3^\circ 1685$, ptm. magn. 7.5, R. A. $6^h 56^m.1$, Dec. $-3^\circ 6'$. In the region of shorter wave length than 4240, the continuous spectrum is barely

visible on plates of normal exposure. When the dispersion is small, the spectrum appears to consist of three wide bright bands, whose centres are at the approximate wave lengths, 4300, 4400, 4840, and whose intensities are estimated to be 3, 6 and 10, respectively.

Class R8. Typical star, B.D. $+61^{\circ} 667$, ptm. magn. 7.92, R.A. $3^h 57^m.2$, Dec. $+61^{\circ} 31'$. The spectrum is very faint from 4240 to the violet, so that on photographs of long dispersion, it is difficult to distinguish between this Class and Class Na.

Class Na. Typical star, 19 Piscium, B.D. $+2^{\circ} 4709$, var., R.A. $23^h 41^m.3$, Dec. $+2^{\circ} 56'$. The spectrum is visible as far towards the violet as the bands H and K, but the portion between 4240 and K is even fainter than in Class R8. When the dispersion is short, the dark band 4700 separates the spectrum into two wide bright bands, the portion from 4400 to 4700 being estimated as 0.8 as intense as that from 4700 to 5100. According to this estimate of the distribution of light, spectra of this Class may be designated 0, 8, 10, when compared with those of Class R5, in which the bands were estimated as 3, 6, 10.

Class Nb. Typical star, B.D. $+67^{\circ} 350$, ptm. magn. 7.39, R.A. $4^h 40^m.8$, Dec. $+67^{\circ} 59'$. This spectrum may be designated 0, 6, 10, when the distribution of light is considered. The bright portion from 4400 to 4700 is now only 0.6 as intense as the portion of greater wave length than 4700.

The spectra of some very red stars have recently been obtained with the 24-inch Reflector, using plates stained with pinacyanol or dicyanin. Some examples are the spectra of the variable stars, VX Andromedae, and S Cephei, and also of the stars R.A. $6^h 33^m.3$, Dec. $+22^{\circ} 42'$, and $+49^{\circ} 3673$, R.A. $21^h 51^m.5$, Dec. $+50^{\circ} 1'$. These spectra show no light of shorter wave length than $H\beta$, and probably form later subdivisions of Class N, but it seems wiser to wait until a larger amount of material has been collected, before assigning definite letters to these very peculiar spectra. In the meantime, the facts so far observed are given in the Remarks.

Pec. All spectra which can not be assigned to any known class, considering their principal characteristics. This includes the spectra of Novae, a few variables, very red stars, and some others.

Con. Spectra apparently continuous. This includes the spectra of nebulae without bright lines, or of clusters which resemble such nebulae with the dispersion employed. As these objects appear as surfaces, and objective prisms are used, dark lines would not be visible. Neb. or Cl. is then given in the magnitude column according to the description of the object in H.A. 60, 8.

Table I contains 27,681 stars, between $4^h 00^m.0$ and $7^h 00^m.0$, whose spectra have been classified. A description of each column of the table is given below, preceded by its heading.

H.D. A number for reference, to be added to the number in heavy type at the top of the first column. It is recommended that these numbers be preceded by the letters H.D., indicating the Henry Draper Catalogue, when reference is made to their designations in this catalogue. Thus, the first star on page 17 may be referred to as H.D. 25,801. This notation also conforms to the designations H.A., H.B., and H.C., which are already in use to denote the Harvard Annals, Bulletins, and Circulars, respectively. In like manner, H.N., H.P., H.R., H.S., and H.V. are used to designate the Harvard Nebulae, Photometry, Revised Photometry, Standard Regions, and Variables, respectively.

DM. The number of the star in the Zone of the Bonn Durchmusterung, when its position for 1855 was north of declination -23° . For stars south of this limit, and whose declination in 1875 was north of -52° , the Cordoba Durchmusterung, and for stars south of -52° , the Cape Photographic Durchmusterung, was used. The number of the zone is generally the same as the degree of declination given in the fourth column. When they differ, owing to precession, the number is placed in *Italics*. The number of the nearest zone is then to be substituted. For stars between 6^h and 18^h of right ascension, the nearest zone is always the northern, for other stars, the southern.

Nearly twelve hundred of these stars are not contained in the Bonn, Cordoba, or Cape Durchmusterungs. They are indicated by the absence of a number in the second column. The spectra of these stars were generally classified from plates taken with the 16-inch Metcalf Telescope.

R. A. 1900. The minutes and tenths of the right ascension for 1900. The right ascension of the first star is given in heavy face figures at the top of the table to the right. These positions are only approximate. Owing to the large number of stars in the Catalogue, they will fall into groups, each containing a number of stars whose right ascension is the same in this table. They are then arranged in the order of declination, the northern star being placed first. It may accordingly happen that, when two stars are near together, the preceding one, as shown by its number in the Durchmusterung, may here follow the other.

Dec. 1900. The declination for 1900, expressed in degrees and minutes.

Ptm. The photometric magnitude. This is taken from H.A. 50 or 54, for stars contained in those works, and is given to hundredths of a magnitude. For other stars, which are north of -62° , the magnitude in the Bonn or Cordoba Durchmusterung is used after reducing it to the photometric scale by means of the tables, given in H.A. 72, 214, 245, and H.A. 80, 132. The magnitudes are then given only to tenths. The magnitudes of stars south of -62° , and which are, therefore, not

contained in the Cordoba Durchmusterung, are also given only to tenths, and are derived from the photographic magnitudes given in the next column, by subtracting the color index depending on the class of spectrum. The color index is taken from H.A. 80, 151, and has the values for B₀, -0.24; B₁, -0.22; B₂, -0.19; B₃, -0.17; B₅, -0.12; B₈, -0.05; B₉, -0.02; A₀, 0.00; A₂, +0.06; A₃, +0.08; A₅, +0.14; F₀, +0.28; F₂, +0.34; F₅, +0.42; F₈, +0.50; G₀, +0.56; G₅, +0.78; K₀, +1.00; K₂, +1.07; K₅, +1.18; M, +1.35.

Ptg. The Photographic Magnitude. For stars north of declination -19° , in 1875, the magnitudes are derived from the photometric magnitudes, contained in the preceding column, by adding the correction for the class of spectrum given above. For stars south of -19° , the magnitude is taken from the Cape Durchmusterung, first reducing it to the standard scale as described in H.A. 80, 256. It will be noticed that when either the photometric or photographic magnitudes are derived by means of the color index, they are placed in *Italics*. In the first case, the color index is subtracted, in the second, added. This method is unsatisfactory from its indirectness, but no direct measures are known to exist.

Sp. The Class of Spectrum. A description of the adopted classification will be found on page 5.

Int. The photographic intensity of the spectrum as estimated by Miss Cannon when she observed it. The faintest spectra which could be classified with certainty were estimated as 1, the densest as 10. When a spectrum was too dense to be classified, it was looked for on a plate showing less faint stars. This might be due to a greater dispersion, a larger load on the pendulum of the control clock, a hazy night, or a slower emulsion.

Rem. Remarks are here indicated which furnish much additional information. The letter R refers to additional facts regarding the star, to be found in the Remarks following Table I. When two figures are given they show that the spectrum was classified on another plate. The first figure indicates, in tenths of the interval between two classes, how much the second classification differs from the first. Thus, if the class in column Sp. was F₀, and the spectrum was again estimated F₀, the first figure would be 0; if the second classification was F₅, it would be 5 and if A₅, it would be 5. The average value of the differences of the first 100 of these is ± 0.13 . A comparison of the classification of spectra taken at the Yerkes, Lick, Allegheny, and Mt. Wilson Observatories with those made here is contained in H.A. 56, 263, and gives the average difference ± 0.14 . When the residual was greater than 5, an estimate on a third plate was made, if practicable. If not, the spectra were re-examined. In case one observation appeared to be wrong, it was rejected,

and the facts are given in the Remarks. The second figure indicates the intensity on the second plate. If the spectrum was estimated on a third plate, a hyphen is inserted, and the estimates will be published later. When the estimates of the class differ, the most reliable one is given in Column Sp. The intensities serve to decide which is most likely to be correct; the order of precedence being 6, 5, 7, 4, 8, 3, 2, 9, 10, 1. When the column is not wide enough for a complete remark, it is given in full in the remarks following Table I.

Pl. No. The number of the plate in its series. The letter b indicates that the instrument used was the 8-inch Bache Telescope; the letter c, the 11-inch Draper Telescope; i, the 8-inch Draper Telescope; m, the 16-inch Metcalf Telescope. When the spectrum was taken from H.A. 28, 56, or 76, the volume and page are given and when derived from an unpublished manuscript, the letter *m* is inserted, instead of the plate number.

Table I is followed by a series of Remarks which give much additional information regarding the individual stars. They include the Bayer designation, additional information regarding the spectrum when it is peculiar, and the position and magnitude of adjacent stars when it is probable that they affect the spectrum. When the stars differ only in declination the spectra are superposed, while equal differences in right ascension are shown at the edges of the spectra. In the case of variable stars, the designation by letter and constellation, and the class are given. Novae are designated by I, long period variables by II, irregular variables by III, short period variables by IV, and Algol variables by V. The magnitude at maximum and minimum, and the period are also given. Parallaxes of $0''.1$, or more, are inserted from Walkey's Parallaxes of 625 stars. B. A. A. 27, App. Proper motions of $1''$, or more, are inserted from the list given by van Maanen in A. P. J. 41, 187.

As an example of the facts that can be derived from Table I, it appears that the first star on page 17, H. D. 25,801, is S. D. $-7^{\circ}737$, R. A. $4^h 0^m.3$, Dec. $-7^{\circ}42'$ (1900). Its magnitude on the photometric scale is 8.7. From the table in H.A. 72, 218, it appears that its magnitude in the Bonn Durchmusterung is 8.5. Its photographic magnitude is 9.7, found from the photometric magnitude by adding the correction 1.0, since its spectrum is K0. The intensity is 3. The observation was made on B 12750, taken with the 8-inch Bache Telescope. It is proposed to give the date, length of exposure, and other facts relating to each plate in H.A. 90.

TABLE I.
THE HENRY DRAPER CATALOGUE.

ANNALS OF HARVARD COLLEGE OBSERVATORY.

25700

3^h 59^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	741	59.5	-21 56	8.6	9.8	K2	1	..	10587b	51	797	59.9	-2 15	10.0	10.3	Fo	4	..	23816b
2	1702	59.5	-25 9	8.7	9.8	K5	2	..	41089b	52	798	59.9	-2 42	7.12	7.12	Ao	10	..	23816b
3	1196	59.5	-40 5	7.57	7.6	A2	7	..	40943b	53	677	59.9	-3 26	9.5	10.6	K2	1	..	23816b
4	612	59.5	-57 30	7.9	8.5	F5	4	0.4	12036b	54	806	59.9	-19 44	7.38	8.1	Ao	8	..	12752b
5	312	59.5	-62 27	4.46	6.7	Mb	..	R	28,196	55	770	59.9	-20 52	9.0	10.7	Ma	1	..	46166b
6	871	59.6	+45 30	10.2	10.2	Ao	3	..	6673m	56	771	59.9	-21 37	8.9	9.8	G5	1	..	10587b
7	548	59.6	+13 2	7.6	7.7	A2	2	..	37601i	57	1667	59.9	-31 37	8.9	10.3	K5	2	..	41072b
8	629	59.6	+4 31	8.7	9.0	Fo	3	5.2	12680b	58	1412	59.9	-38 52	8.7	9.3	Ko	3	..	40943b
9	811	59.6	-6 26	8.7	8.7	Ao	2	..	10637b	59	1410	59.9	-38 56	9.6	9.6	F5	2	..	40943b
10	831	59.6	-10 30	8.2	8.8	Go	6	..	18192b	60	1305	59.9	-39 3	8.9	9.0	F5	3	..	40943b
11	786	59.6	-12 47	9.3	10.5	K5	1	..	18192b	61	1306	59.9	-39 40	8.9	10.5	Ma	1	..	39655b
12	810	59.6	-14 7	9.3	10.4	K2	2	..	18192b	62	1384	59.9	-44 52	8.98	9.8	Ko	3	..	41076b
13	1303	59.6	-39 39	7.50	8.7	Ko	4	..	40943b	63	R	59.9	-60 52	..	..	K5	1	..	23802b
14	1379	59.6	-44 35	8.7	8.7	B9	5	..	41076b	64	215	0.0	+74 6	8.4	9.6	K5	4	..	6449m
15	55	59.6	-87 55	9.7	10.0	Fo	3	..	15145b	65	310	0.0	+68 7	7.32	7.60	Fo	6	..	37556i
16	163	59.7	+75 27	9.9	11.3	Mb	1	..	6449m	66	1044	0.0	+48 50	8.9	9.3	F5	3	..	37406i
17	235	59.7	+71 45	9.2	9.8	Go	2	..	38165i	67	857	0.0	+44 23	9.5	10.6	K2	1	..	6673m
18	856	59.7	+51 22	8.7	8.7	A	2	..	37406i	68	675	0.0	+25 56	7.49	7.99	F8	3	..	37417i
19	854	59.7	+44 24	9.5	9.5	A	2	..	7197m	69	788	0.0	-12 4	8.7	9.1	F5	4	..	18192b
20	658	59.7	+19 42	8.3	8.7	F5	3	0.2	37417i	70	1173	0.0	-48 13	10.1	10.8	Ko	1	..	38413b
21	812	59.7	-6 26	9.8	10.8	Ko	1	..	12679b	71	1174	0.0	-48 39	7.06	8.5	Ko	7	..	38413b
22	734	59.7	-7 1	8.8	9.8	Ko	3	..	12679b	72	247	0.0	-73 40	8.2	9.2	Ko	4	..	15162b
23	806	59.7	-13 4	5.67	6.45	G5	10	..	18192b	73	121	0.0	-78 49	8.8	9.8	Ko	1	..	14359b
24	812	59.7	-14 32	8.2	8.3	A3	7	..	18192b	74	240	0.1	+70 5	8.09	8.87	G5	4	..	38165i
25	771	59.7	-16 0	var.	var.	Mc	3	R	18192b	75	904	0.1	+50 33	9.2	9.2	Ao	1	..	38087i
26	1304	59.7	-39 16	9.6	10.4	F8	2	..	39655b	76	1046	0.1	+48 39	9.4	9.5	A5	1	..	38087i
27	647	59.7	-53 54	8.8	10.0	Ko	2	..	14920b	77	874	0.1	+46 6	10.2	11.3	K2	2	..	6673m
28	293	59.7	-61 22	4.81	6.7	K5	..	5.1	28,196	78	873	0.1	+46 0	9.9	11.0	K2	2	..	6673m
29	244	59.7	-66 28	8.2	9.0	G5	6	..	20430b	79	631	0.1	+8 56	8.8	9.3	F8	3	..	37566i
30	145	59.8	+78 7	8.5	9.5	Ko	2	..	37309i	80	799	0.1	-2 2	9.4	9.7	Fo	4	..	23816b
31	213	59.8	+73 57	10.2	11.2	Ko	1	..	6449m	81	800	0.1	-2 10	8.8	9.8	Ko	7	..	23816b
32	214	59.8	+73 30	10.2	10.8	Go	1	..	6449m	82	816	0.1	-5 3	8.1	8.5	F5	5	..	12679b
33	309	59.8	+67 33	9.9	10.5	Go	2	..	38165i	83	813	0.1	-14 31	9.4	10.5	K2	1	..	18192b
34	780	59.8	+60 37	7.46	7.44	B9	6	..	37427i	84	712	0.1	-15 18	9.1	9.2	A2	3	..	18192b
35	855	59.8	+44 38	9.5	9.5	Ao	4	..	6673m	85	1588	0.1	-32 3	8.8	9.1	F8	3	..	12259b
36	856	59.8	+44 24	9.0	9.0	B8	5	R	6673m	86	1584	0.1	-37 21	7.08	7.6	A3	8	..	40943b
37	696	59.8	+20 57	9.1	9.7	G	2	..	37589i	87	861	0.2	+51 11	7.49	7.32	B3	5	0.4	38981i
38	727	59.8	-3 53	9.5	9.6	A2	2	..	23816b	88	580	0.2	+15 14	8.09	8.65	Go	3	..	38110i
39	1666	59.8	-31 20	8.9	9.7	G5	2	..	41072b	89	640	0.2	-0 50	7.06	7.48	F5	5	3.7	37549i
40	1381	59.8	-44 40	8.22	8.6	Go	5	..	41076b	90	581	0.2	-1 17	7.6	8.4	G5	6	0.4	37593i
41	1192	59.8	-49 7	9.0	9.6	Ko	3	..	38413b	91	729	0.2	-4 22	8.9	9.4	F8	4	..	23816b
42	314	59.8	-62 16	10.0	11.0	Ko	2	..	23802b	92	789	0.2	-12 4	8.1	8.1	Ao	7	2.2	18192b
43	294	59.8	-64 42	8.00	8.0	A5	7	..	20430b	93	774	0.2	-21 44	9.1	9.5	Go	1	..	10587b
44	104	59.8	-80 52	8.7	9.0	F2	5	..	20538b	94	1670	0.2	-31 33	9.2	9.7	G	3	R	41072b
45	239	59.9	+69 21	9.2	9.2	Ao	2	..	38165i	95	1386	0.2	-44 25	7.6	9.5	Ko	5	..	41076b
46	872	59.9	+45 19	10.2	11.0	G5	1	..	6673m	96	315	0.2	-62 14	8.4	8.7	F2	6	..	23802b
47	893	59.9	+43 58	9.9	10.0	A2	1	..	6673m	97	259	0.2	-76 48	7.7	8.0	F2	7	3.8	46167b
48	675	59.9	+26 16	8.6	8.6	A	1	..	38111i	98	895	0.3	+43 54	9.7	9.7	Ao	2	..	6673m
49	640	59.9	+14 2	7.6	8.6	Ko	3	..	37601i	99	703	0.3	+32 6	6.87	6.70	B3	6	5.5	37451i
50	639	59.9	-0 28	8.9	9.0	A3	3	..	23816b	100	532	0.3	+9 46	6.78	7.56	G5	5	..	37566i

THE HENRY DRAPER CATALOGUE.

25800

4^h 0^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	737	m. 0.3	° 7 42	8.7	9.7	Ko	3	..	12750b	51	680	m. 0.7	° 3 2	9.1	9.5	F5	4	..	23816b
2	807	0.3	— 9 32	8.1	9.3	K5	3	..	18192b	52	738	0.7	— 7 52	8.1	9.1	Ko	5	..	12750b
3	774	0.3	— 20 38	6.28	7.2	Ko	8	..	10587b	53	809	0.7	— 13 16	9.4	9.8	F5	2	..	18192b
4	1530	0.3	— 27 56	8.5	9.3	Go	4	..	41072b	54	2076	0.7	— 24 42	8.9	9.2	G5	4	0,3	41072b
5	1673	0.3	— 31 8	8.9	10.3	Ko	2	..	41072b	55	1714	0.7	— 25 47	8.41	8.9	F5	5	..	41072b
6	1672	0.3	— 31 34	9.2	9.4	A3	4	..	41072b	56	1392	0.7	— 28 37	8.3	8.3	F2	5	..	41072b
7	1584	0.3	— 36 23	9.9	11.3	G	2	..	39655b	57	1634	0.7	— 30 17	10.2	9.8	G5	2	..	41072b
8	594	0.3	— 55 2	9.10	9.9	K5	2	..	46085b	58	1591	0.7	— 32 45	9.1	9.1	A2	4	..	12259b
9	280	0.3	— 67 26	9.8	10.4	Go	2	..	20430b	59	1182	0.7	— 48 1	10.1	9.7	Go	3	..	38413b
10	875	0.4	+ 45 45	9.5	9.5	Ao	4	..	6673m	60	1181	0.7	— 48 8	6.67	7.1	A5	10	..	38413b
11	662	0.4	+ 19 36	8.9	9.2	Fo	2	..	37589i	61	596	0.7	— 55 53	8.5	9.8	K5	2	3,2	46085b
12	537	0.4	+ 10 43	8.4	8.8	F5	3	..	37566i	62	614	0.7	— 57 44	8.3	8.3	Fo	4	0,4	12036b
13	582	0.4	— 1 30	8.4	9.4	Ko	6	..	23816b	63	256	0.7	— 75 2	9.8	9.8	A	1	..	17047b
14	814	0.4	— 6 41	8.7	9.0	Fo	4	..	12679b	64	154	0.7	— 77 7	9.6	10.0	F5	3	..	15162b
15	1555	0.4	— 29 47	8.9	9.4	F2	3	0,3	12259b	65	860	0.8	+ 45 3	9.9	9.9	Ao	2	..	7197m
16	996	0.4	— 51 56	7.7	8.7	Ko	5	..	14920b	66	877	0.8	+ 37 46	8.0	9.0	Ko	2	..	35136i
17	206	0.5	+ 73 3	10.2	11.0	G5	1	..	6449m	67	619	0.8	+ 28 44	5.29	5.57	Fo	..	R	56,76
18	306	0.5	+ 66 35	8.1	9.3	K5	2	..	38165i	68	581	0.8	+ 18 53	7.62	7.96	F2	5	2,3	37589i
19	893	0.5	+ 43 1	8.2	8.2	Ao	3	1,7	37010i	69	633	0.8	+ 8 14	7.8	8.3	F8	5	..	37566i
20	894	0.5	+ 42 36	8.7	9.3	Go	2	..	38933i	70	583	0.8	— 0 55	9.2	9.6	F5	3	..	23816b
21	841	0.5	+ 38 12	8.4	8.7	Fo	2	..	38939i	71	744	0.8	— 22 23	8.5	9.5	F2	5	..	41089b
22	800	0.5	+ 36 4	8.4	8.4	Ao	3	..	38939i	72	1559	0.8	— 29 12	8.7	10.3	Ko	2	..	41072b
23	633	0.5	+ 27 21	5.27	5.27	Aop	..	R	56,76	73	491	0.8	— 52 47	8.0	8.7	Fo	7	..	14920b
24	634	0.5	+ 27 16	8.6	9.6	Ko	1	..	38111i	74	295	0.8	— 61 38	7.3	7.1	G5	9	..	23802b
25	582	0.5	+ 15 26	7.96	8.52	Go	4	..	37601i	75	317	0.8	— 62 54	9.4	10.4	Ko	2	..	23802b
26	641	0.5	— 0 5	8.4	9.6	K5	3	..	23816b	76	296	0.8	— 64 51	9.10	9.6	G5	3	..	20430b
27	815	0.5	— 6 36	8.7	9.9	K5	2	..	12679b	77	759	0.9	+ 59 40	6.46	7.46	Ko	6	..	37427i
28	1729	0.5	— 22 59	8.5	9.5	Ko	3	..	41089b	78	771	0.9	+ 53 6	7.07	8.07	Ko	4	R	37435i
29	1254	0.5	— 47 47	9.5	10.4	F8	3	..	38413b	79	861	0.9	+ 44 51	9.5	10.6	K2	2	..	7197m
30	1178	0.5	— 48 2	9.5	9.7	F8	3	..	38413b	80	642	0.9	+ 14 6	8.5	9.1	G	2	R	37601i
31	295	0.5	— 63 59	9.1	10.1	Ko	4	..	23802b	81	696	0.9	+ 0 33	8.5	8.5	Ao	4	..	23816b
32	859	0.6	+ 44 34	9.4	9.4	B9	4	..	6673m	82	777	0.9	— 21 43	8.10	9.2	K2	2	..	10587b
33	785	0.6	+ 33 11	6.61	6.44	B3	6	2,6	37451i	83	1636	0.9	— 30 30	7.77	8.2	Fo	7	0,6	12259b
34	672	0.6	+ 30 0	8.01	9.08	K2	3	2,2	38135i	84	1421	0.9	— 38 16	9.5	10.4	G5	2	..	39655b
35	677	0.6	+ 25 28	8.2	8.2	Ao	3	..	37417i	85	1255	0.9	— 50 31	8.5	9.3	Ko	4	..	38413b
36	591	0.6	+ 21 41	8.2	9.3	K2	1	..	37589i	86	77	0.9	— 83 21	9.6	10.1	F8	2	..	20538b
37	803	0.6	— 2 21	10.1	10.7	Go	3	..	23816b	87	44	0.9	— 85 34	6.46	6.1	B9	..	1,7	56,120
38	775	0.6	— 21 6	8.7	10.7	K5	1	..	46166b	88	190	1.0	+ 74 38	10.2	10.3	A2	2	..	6449m
39	1390	0.6	— 28 1	9.7	9.8	Go	2	..	41072b	89	908	1.0	+ 50 41	7.7	7.7	B8	4	..	37406i
40	1539	0.6	— 35 1	8.79	10.4	K2	3	..	39655b	90	1105	1.0	+ 49 38	8.1	8.6	F8	2	..	37406i
41	1417	0.6	— 38 25	9.5	9.6	G5	3	..	39655b	91	876	1.0	+ 45 20	8.4	9.2	G5	5	..	6673m
42	1389	0.6	— 44 45	8.7	8.7	Go	6	..	41076b	92	895	1.0	+ 42 48	8.9	10.3	Mb	2	5,1	6673m
43	1381	0.6	— 45 1	7.58	7.9	Ao	8	..	41076b	93	878	1.0	+ 37 49	7.10	7.88	G5	3	0,2	37451i
44	294	0.6	— 61 5	10.7	10.8	A2	2	..	23802b	94	635	1.0	+ 27 14	8.8	9.6	G5	2	0,1	38135i
45	..	0.7	+ 46 32	..	..	G	1	..	7197m	95	682	1.0	+ 17 23	8.4	9.0	Go	3	..	37601i
46	896	0.7	+ 43 42	10.2	11.0	G5	2	..	7197m	96	642	1.0	— 0 17	8.2	9.0	G5	5	5,2	23816b
47	818	0.7	+ 37 1	7.7	8.7	Ko	3	0,2	38899i	97	584	1.0	— 1 37	9.2	9.6	F5	5	..	23816b
48	617	0.7	+ 23 15	8.8	9.3	F2	2	0,4	37417i	98	793	1.0	— 11 53	8.6	8.7	A5	3	..	18192b
49	650	0.7	+ 14 8	7.8	8.1	F2	5	..	37601i	99	1638	1.0	— 30 28	8.5	9.7	K2	2	3,2	41072b
50	632	0.7	+ 4 25	8.8	9.2	F5	2	..	12680b	100	1208	1.0	— 40 2	9.15	9.0	Ao	4	..	39655b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

25900

4^h 1^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	492	m. 1.0	° 52 28	8.6	9.0	B ₉	6	..	14920b	51	597	m. 1.5	° 7 56	8.6	9.6	K ₀	3	..	37566i
2	304	1.0	-59 49	8.72	10.2	K ₅	3	..	23802b	52	633	1.5	+ 4 38	8.8	9.2	F ₅	2	3,2	37593i
3	305	1.0	-59 51	7.98	7.9	F ₂	7	..	23802b	53	699	1.5	+ 1 25	8.0	8.4	F ₅	5	3,3-	12680b
4	127	1.1	+80 17	6.63	7.63	K ₀	..	5,8	2503c	54	785	1.5	- 8 5	8.1	9.1	K ₀	6	..	12750b
5	307	1.1	+66 28	9.2	9.6	F ₅	1	..	38165i	55	813	1.5	- 8 58	9.4	9.7	F ₀	2	..	12750b
6	708	1.1	+58 18	7.02	7.30	F ₀	6	0,5	37427i	56	1283	1.5	-46 11	7.8	9.2	G ₅	4	..	41076b
7	896	1.1	+42 56	7.12	8.12	K ₀	2	..	37010i	57	237	1.6	+72 2	9.0	9.5	F ₈	3	..	38165i
8	705	1.1	+31 33	9.0	9.0	A ₀	2	..	38111i	58	863	1.6	+45 0	9.47	9.47	A ₀	4	..	6673m
9	682	1.1	- 3 13	9.7	9.7	A	2	R	23816b	59	645	1.6	+13 34	8.2	8.5	F	2	..	38110i
10	811	1.1	- 9 8	6.26	6.32	A ₂	8	..	10637b	60	798	1.6	-12 10	8.9	9.2	F ₂	3	0,3	18192b
11	1544	1.1	-26 5	9.5	9.5	F ₈	3	..	41072b	61	2090	1.6	-24 2	9.7	10.1	A ₅	2	..	41089b
12	493	1.1	-52 12	8.1	9.0	G ₀	6	..	14920b	62	1564	1.6	-29 25	9.4	10.9	K ₅	1	..	41072b
13	649	1.1	-53 12	7.5	7.4	F ₀	9	..	14920b	63	1547	1.6	-33 4	8.2	9.7	K ₅	2	..	12259b
14	884	1.2	+56 50	8.1	7.9	B ₀	3	R	38981i	64	1548	1.6	-33 52	8.8	10.3	K ₀	1	..	12259b
15	1106	1.2	+50 1	8.42	8.42	A ₀	2	..	37406i	65	1366	1.6	-42 11	8.7	9.3	G ₀	3	..	41076b
16	..	1.2	+46 24	..	..	G	2	..	6673m	66	1388	1.6	-44 57	8.34	10.4	K ₂	4	..	41076b
17	877	1.2	+46 0	8.8	9.6	G ₅	3	..	6673m	67	1183	1.6	-47 56	8.5	9.7	K ₂	3	..	38413b
18	862	1.2	+44 25	7.64	8.42	G ₅	4	0,8	37010i	68	598	1.6	-55 40	7.4	8.0	A ₂	8	..	14920b
19	823	1.2	+36 52	9.0	9.6	G ₀	1	..	38939i	69	621	1.6	-56 18	9.0	9.5	F ₈	3	R	46085b
20	585	1.2	- 1 44	9.9	10.3	F ₅	4	..	23816b	70	879	1.7	+45 54	9.9	9.9	B ₉	3	..	6673m
21	834	1.2	-10 34	7.30	8.65	Mb	5	..	18192b	71	880	1.7	+45 14	10.2	10.7	F ₈	1	..	7197m
22	796	1.2	-11 57	9.4	10.4	K ₀	1	..	18192b	72	901	1.7	+43 46	10.2	11.0	G ₅	1	..	7197m
23	715	1.2	-15 14	8.7	9.1	F ₅	5	..	18192b	73	899	1.7	+43 25	7.9	8.9	K ₀	6	0,3	6673m
24	1396	1.2	-28 37	10.6	9.3	G ₀	2	R	41072b	74	900	1.7	+43 20	9.5	10.1	G	2	..	6673m
25	1679	1.2	-31 26	8.3	8.8	F ₀	5	0,4	41072b	75	881	1.7	+37 28	6.20	6.98	G ₅	6	..	37451i
26	1544	1.2	-35 44	7.6	7.9	G ₀	7	..	39655b	76	795	1.7	+33 51	8.0	8.0	A ₀	2	0,2	10405i
27	1587	1.2	-36 7	8.5	7.8	F ₈	5	..	39655b	77	646	1.7	+13 16	7.8	7.9	A ₃	4	..	37601i
28	1426	1.2	-38 1	9.5	10.2	G ₅	3	..	39655b	78	571	1.7	+12 1	7.4	7.4	B ₉	5	..	37601i
29	1108	1.3	+49 56	6.98	6.98	A ₀	..	0,5	56,76	79	538	1.7	+10 31	8.2	8.7	F ₈	4	..	37566i
30	843	1.3	+46 26	8.9	10.0	K ₂	4	..	6673m	80	807	1.7	- 2 10	8.7	9.7	K ₀	6	..	23816b
31	878	1.3	+46 7	8.7	8.7	B ₈	5	..	6673m	81	747	1.7	-22 24	9.1	10.5	K ₀	1	..	41089b
32	897	1.3	+42 56	6.67	6.62	B ₈	7	..	37010i	82	1549	1.7	-26 56	9.1	9.8	G ₀	3	..	41072b
33	644	1.3	+13 28	8.4	9.2	G ₅	1	..	38110i	83	1687	1.7	-31 19	6.74	7.4	F ₈	8	3,8	41072b
34	818	1.3	-14 17	9.1	9.2	A ₅	5	..	18192b	84	1600	1.7	-32 5	9.5	9.1	F ₅	3	..	12259b
35	1316	1.3	-39 8	10.5	10.7	G ₀	1	..	39655b	85	1320	1.7	-39 37	9.5	10.5	G ₀	2	..	39655b
36	1272	1.3	-41 33	9.4	9.3	G ₀	5	..	41076b	86	296	1.7	-61 32	9.3	9.3	B ₉	5	..	23802b
37	1258	1.3	-47 39	9.9	10.7	F ₀	3	..	38413b	87	881	1.8	+45 58	7.07	7.07	A ₀	4	0,9-	37406i
38	234	1.3	-71 27	6.72	6.7	A ₀	10	..	17047b	88	697	1.8	+ 0 12	9.4	10.4	K ₀	2	..	23816b
39	885	1.4	+56 11	8.5	9.7	K ₅	1	0,1	37435i	89	1264	1.8	-50 50	9.2	10.2	K ₀	2	..	38413b
40	939	1.4	+47 27	4.03	3.86	B _{3p}	..	R	56,76	90	298	1.8	-64 20	9.1	10.2	K ₂	2	..	20430b
41	898	1.4	+44 6	9.5	10.5	K ₀	2	..	6673m	91	306	1.9	+68 44	9.2	9.3	A ₅	4	..	38165i
42	589	1.4	+ 5 26	8.4	8.9	F ₈	3	0,3	37566i	92	681	1.9	+61 28	8.17	9.35	K ₅	1	..	37556i
43	717	1.4	-15 0	8.40	9.47	K ₂	4	..	18192b	93	763	1.9	+59 54	8.4	8.7	F ₀	3	..	37427i
44	780	1.4	-20 47	6.42	7.6	G ₅	8	..	10587b	94	..	1.9	+46 56	..	..	A ₂	3	..	7197m
45	1540	1.4	-27 56	5.57	5.71	A ₅	..	..	56,120	95	844	1.9	+46 26	9.4	10.5	K ₂	3	..	6673m
46	1588	1.4	-36 39	8.5	10.6	K ₂	3	..	39655b	96	903	1.9	+43 20	9.9	10.7	G ₅	1	..	6673m
47	319	1.4	-62 40	9.4	9.8	F ₅	3	..	23802b	97	936	1.9	+39 27	8.0	9.0	K ₀	1	..	38939i
48	740	1.5	+54 34	6.28	6.70	F ₅	6	0,9-	37427i	98	882	1.9	+37 47	5.59	6.09	F ₈	7	0,8	37451i
49	815	1.5	+41 14	7.64	7.64	A ₀	3	..	37010i	99	726	1.9	+32 12	7.40	7.46	A ₂	3	2,3	10405i
50	825	1.5	+36 42	8.4	8.4	A ₀	3	..	38939i	100	656	1.9	+14 44	8.4	8.8	F ₅	1	..	37601i

THE HENRY DRAPER CATALOGUE.

26000

4^h 1^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	684	1.9	- 2 57	10.1	10.7	G	1	..	23816b	51	937	2.4	+39 53	7.47	7.97	F8	2	..	3701oi
2	787	1.9	- 8 45	8.7	9.7	Ko	2	..	1275ob	52	587	2.4	- 1 11	9.9	10.5	Go	1	..	23816b
3	812	1.9	-13 28	8.7	9.2	F8	2	..	11798b	53	814	2.4	- 2 38	8.3	8.7	F5	6	..	23816b
4	820	1.9	-19 47	7.63	8.6	K5	5	..	12752b	54	782	2.4	-16 15	7.9	8.2	F2	5	..	12752b
5	750	1.9	-22 7	9.4	9.8	G5	2	..	41089b	55	754	2.4	-18 13	8.5	9.6	K2	1	..	12752b
6	749	1.9	-22 48	9.4	10.4	G5	1	..	41089b	56	784	2.4	-20 44	9.4	9.9	G5	2	..	41089b
7	1739	1.9	-23 34	8.7	9.2	G5	4	..	41089b	57	753	2.4	-21 56	8.7	8.9	Go	6	..	41089b
8	1550	1.9	-26 1	9.4	9.6	F8	4	..	41072b	58	617	2.4	-57 26	8.4	9.5	A2	2	2,1	20264b
9	1642	1.9	-29 57	8.49	9.7	Ma	3	0,2-	41072b	59	308	2.4	-59 14	8.4	9.4	K2	7	..	23802b
10	1551	1.9	-35 44	8.1	9.1	Ko	4	..	39655b	60	311	2.5	+67 44	8.6	9.6	Ko	3	..	38165i
11	1186	1.9	-48 2	11.6	9.9	Go	3	..	38413b	61	765	2.5	+60 7	9.16	10.23	K2	..	..	M
12	147	2.0	+81 43	7.33	7.33	Ao	7	..	37558i	62	885	2.5	+45 13	10.2	10.5	F2	1	..	7197m
13	242	2.0	+69 39	9.2	9.5	F2	4	..	38165i	63	668	2.5	+19 29	7.8	7.9	A2	5	1,3	37589i
14	307	2.0	+69 1	9.0	9.6	Go	3	..	38165i	64	562	2.5	+ 4 4	9.6	10.2	Go	2	..	37593i
15	657	2.0	+14 54	5.94	6.22	Fo	6	0,9	37511i	65	649	2.5	+ 2 28	8.6	9.8	K5	1	..	23816b
16	1741	2.0	-23 45	8.5	9.2	Ko	3	..	41089b	66	822	2.5	- 6 17	6.87	6.93	A2	4	0,9	10637b
17	79	2.0	-82 37	9.3	9.9	Go	2	..	20538b	67	815	2.5	- 9 1	9.1	9.9	G5	2	..	1275ob
18	166	2.1	+76 3	8.22	9.00	G5	5	..	6449m	68	841	2.5	-10 2	7.02	8.02	Ko	6	..	18192b
19	165	2.1	+76 1	8.84	9.62	G5	4	0,3	6449m	69	1695	2.5	-30 56	10.4	9.4	F8	2	..	41072b
20	738	2.1	+53 37	8.0	8.5	F8	3	..	37435i	70	1603	2.5	-37 46	8.8	10.3	G5	3	..	39655b
21	884	2.1	+45 49	10.2	10.2	Ao	2	..	6673m	71	1328	2.5	-39 16	9.1	9.3	Go	4	..	39655b
22	708	2.1	+31 16	8.0	8.0	Ao	2	..	38135i	72	1280	2.5	-41 53	8.9	9.6	Ko	2	..	41076b
23	736	2.1	- 4 38	9.1	9.2	A3	3	..	10594b	73	1372	2.5	-42 14	8.4	9.3	G5	4	..	41076b
24	752	2.1	-18 19	6.75	7.93	K5	7	..	12752b	74	1293	2.5	-45 56	7.3	7.5	A5	7	..	41076b
25	1552	2.1	-35 21	8.0	9.1	Ko	4	..	39655b	75	1294	2.5	-46 24	9.5	11.3	G5	2	..	41076b
26	622	2.1	-54 32	9.5	10.1	Go	2	..	46085b	76	239	2.6	+71 52	6.15	6.93	G5	6	5,8	37555i
27	291	2.1	-63 52	9.9	10.9	Ko	3	..	23802b	77	766	2.6	+59 56	8.0	8.0	Ao	3	..	37427i
28	105	2.1	-80 22	9.1	10.3	K5	1	..	20538b	78	943	2.6	+47 15	9.4	9.4	A	1	..	37406i
29	..	2.2	+46 53	..	..	G5	1	..	7197m	79	846	2.6	+46 21	10.2	10.2	Ao	3	..	6673m
30	864	2.2	+44 19	10.2	10.2	Ao	2	..	6673m	80	829	2.6	+36 10	7.7	9.1	Ma	2	5,1	38939i
31	818	2.2	+41 15	6.90	6.98	A3	5	..	3701oi	81	678	2.6	+25 38	7.40	8.40	Ko	3	..	37417i
32	796	2.2	+33 27	7.8	8.6	G5	2	..	38939i	82	651	2.6	+ 2 53	9.2	9.3	A2	1	..	37593i
33	586	2.2	- 1 21	10.6	11.1	F8	3	..	23816b	83	588	2.6	- 1 53	9.02	10.02	Ko	2	..	23816b
34	812	2.2	- 2 22	10.3	10.6	F	2	..	23816b	84	685	2.6	- 3 15	8.1	9.1	Ko	5	..	23816b
35	785	2.2	-21 51	9.7	11.0	K5	1	..	41089b	85	823	2.6	- 6 44	9.4	10.0	G	1	..	1275ob
36	1728	2.2	-24 57	8.9	10.4	K5	2	3,2	41072b	86	746	2.6	- 7 13	8.8	9.6	G5	4	..	1275ob
37	593	2.3	+21 45	9.0	9.4	F5	2	..	37589i	87	754	2.6	-22 15	6.58	7.3	A3	10	..	41089b
38	560	2.3	+17 4	6.13	7.13	Ko	5	0,7	37511i	88	234	2.6	-69 13	7.52	9.3	K2	6	..	2043ob
39	559	2.3	+16 16	7.52	7.50	B9	4	..	37601i	89	309	2.7	+68 31	9.5	10.3	G5	1	..	38165i
40	839	2.3	-10 16	7.04	7.60	Go	8	..	18192b	90	624	2.7	+28 56	8.6	9.2	Go	4	5,3	38111i
41	1648	2.3	-30 26	9.7	10.6	G5	1	..	41072b	91	647	2.7	+13 17	8.8	9.6	G5	1	..	3811oi
42	1216	2.3	-40 48	8.5	9.3	F2	4	..	39655b	92	563	2.7	+ 4 2	8.5	8.9	F5	4	0,2-	37593i
43	1261	2.3	-47 30	8.7	10.7	K2	3	..	38413b	93	747	2.7	- 7 21	9.7	10.1	F5	3	..	1275ob
44	1188	2.3	-48 6	9.3	9.3	F5	4	..	38413b	94	814	2.7	-12 56	8.3	9.3	Ko	3	..	11798b
45	624	2.3	-56 4	8.9	9.5	K2	2	2,1	46085b	95	756	2.7	-22 40	9.4	9.8	A3	2	..	41089b
46	625	2.3	-56 25	8.6	9.5	Ko	2	..	12036b	96	1263	2.7	-47 4	8.1	10.4	K2	2	..	41076b
47	167	2.4	+75 34	8.62	8.96	F2	5	..	6449m	97	1008	2.7	-51 39	7.8	8.7	G5	6	..	1492ob
48	776	2.4	+52 45	8.6	8.6	Ao	2	..	38981i	98	618	2.7	-57 31	8.4	10.1	Ko	1	5,1	20264b
49	845	2.4	+47 2	9.9	10.9	Ko	3	..	7197m	99	292	2.7	-63 3	9.3	10.4	K2	4	..	23802b
50	909	2.4	+43 22	9.9	10.0	A2	3	..	6673m	100	78	2.7	-83 41	9.2	9.5	F2	5	..	20538b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

25900

4^h 1^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	492	m. 1.0	° 52 28	8.6	9.0	B ₉	6	..	1492ob	51	597	m. 1.5	° 7 56	8.6	9.6	K ₀	3	..	37566i
2	304	1.0	-59 49	8.72	10.2	K ₅	3	..	23802b	52	633	1.5	+ 4 38	8.8	9.2	F ₅	2	3,2	37593i
3	305	1.0	-59 51	7.98	7.9	F ₂	7	..	23802b	53	699	1.5	+ 1 25	8.0	8.4	F ₅	5	3,3-	1268ob
4	127	1.1	+80 17	6.63	7.63	K ₀	..	5,8	2503c	54	785	1.5	- 8 5	8.1	9.1	K ₀	6	..	1275ob
5	307	1.1	+66 28	9.2	9.6	F ₅	1	..	38165i	55	813	1.5	- 8 58	9.4	9.7	F ₀	2	..	1275ob
6	708	1.1	+58 18	7.02	7.30	F ₀	6	0,5	37427i	56	1283	1.5	-46 11	7.8	9.2	G ₅	4	..	41076b
7	896	1.1	+42 56	7.12	8.12	K ₀	2	..	3701oi	57	237	1.6	+72 2	9.0	9.5	F ₈	3	..	38165i
8	705	1.1	+31 33	9.0	9.0	A ₀	2	..	38111i	58	863	1.6	+45 0	9.47	9.47	A ₀	4	..	6673m
9	682	1.1	- 3 13	9.7	9.7	A	2	R	23816b	59	645	1.6	+13 34	8.2	8.5	F	2	..	3811oi
10	811	1.1	- 9 8	6.26	6.32	A ₂	8	..	10637b	60	798	1.6	-12 10	8.9	9.2	F ₂	3	0,3	18192b
11	1544	1.1	-26 5	9.5	9.5	F ₈	3	..	41072b	61	2090	1.6	-24 2	9.7	10.1	A ₅	2	..	41089b
12	493	1.1	-52 12	8.1	9.0	G ₀	6	..	1492ob	62	1564	1.6	-29 25	9.4	10.9	K ₅	1	..	41072b
13	649	1.1	-53 12	7.5	7.4	F ₀	9	..	1492ob	63	1547	1.6	-33 4	8.2	9.7	K ₅	2	..	12259b
14	884	1.2	+56 50	8.1	7.9	B ₀	3	R	38981i	64	1548	1.6	-33 52	8.8	10.3	K ₀	1	..	12259b
15	1106	1.2	+50 1	8.42	8.42	A ₀	2	..	37406i	65	1366	1.6	-42 11	8.7	9.3	G ₀	3	..	41076b
16	..	1.2	+46 24	..	..	G	2	..	6673m	66	1388	1.6	-44 57	8.34	10.4	K ₂	4	..	41076b
17	877	1.2	+46 0	8.8	9.6	G ₅	3	..	6673m	67	1183	1.6	-47 56	8.5	9.7	K ₂	3	..	38413b
18	862	1.2	+44 25	7.64	8.42	G ₅	4	0,8	3701oi	68	598	1.6	-55 40	7.4	8.0	A ₂	8	..	1492ob
19	823	1.2	+36 52	9.0	9.6	G ₀	1	..	38939i	69	621	1.6	-56 18	9.0	9.5	F ₈	3	R	46085b
20	585	1.2	- 1 44	9.9	10.3	F ₅	4	..	23816b	70	879	1.7	+45 54	9.9	9.9	B ₉	3	..	6673m
21	834	1.2	-10 34	7.30	8.65	Mb	5	..	18192b	71	880	1.7	+45 14	10.2	10.7	F ₈	1	..	7197m
22	796	1.2	-11 57	9.4	10.4	K ₀	1	..	18192b	72	901	1.7	+43 46	10.2	11.0	G ₅	1	..	7197m
23	715	1.2	-15 14	8.7	9.1	F ₅	5	..	18192b	73	899	1.7	+43 25	7.9	8.9	K ₀	6	0,3	6673m
24	1396	1.2	-28 37	10.6	9.3	G ₀	2	R	41072b	74	900	1.7	+43 20	9.5	10.1	G	2	..	6673m
25	1679	1.2	-31 26	8.3	8.8	F ₀	5	0,4	41072b	75	881	1.7	+37 28	6.20	6.98	G ₅	6	..	37451i
26	1544	1.2	-35 44	7.6	7.9	G ₀	7	..	39655b	76	795	1.7	+33 51	8.0	8.0	A ₀	2	0,2	10405i
27	1587	1.2	-36 7	8.5	7.8	F ₈	5	..	39655b	77	646	1.7	+13 16	7.8	7.9	A ₃	4	..	37601i
28	1426	1.2	-38 1	9.5	10.2	G ₅	3	..	39655b	78	571	1.7	+12 1	7.4	7.4	B ₉	5	..	37601i
29	1108	1.3	+49 56	6.98	6.98	A ₀	..	0,5	56,76	79	538	1.7	+10 31	8.2	8.7	F ₈	4	..	37566i
30	843	1.3	+46 26	8.9	10.0	K ₂	4	..	6673m	80	807	1.7	- 2 10	8.7	9.7	K ₀	6	..	23816b
31	878	1.3	+46 7	8.7	8.7	B ₈	5	..	6673m	81	747	1.7	-22 24	9.1	10.5	K ₀	1	..	41089b
32	897	1.3	+42 56	6.67	6.62	B ₈	7	..	3701oi	82	1549	1.7	-26 56	9.1	9.8	G ₀	3	..	41072b
33	644	1.3	+13 28	8.4	9.2	G ₅	1	..	3811oi	83	1687	1.7	-31 19	6.74	7.4	F ₈	8	3,8	41072b
34	818	1.3	-14 17	9.1	9.2	A ₅	5	..	18192b	84	1600	1.7	-32 5	9.5	9.1	F ₅	3	..	12259b
35	1316	1.3	-39 8	10.5	10.7	G ₀	1	..	39655b	85	1320	1.7	-39 37	9.5	10.5	G ₀	2	..	39655b
36	1272	1.3	-41 33	9.4	9.3	G ₀	5	..	41076b	86	296	1.7	-61 32	9.3	9.3	B ₉	5	..	23802b
37	1258	1.3	-47 39	9.9	10.7	F ₀	3	..	38413b	87	881	1.8	+45 58	7.07	7.07	A ₀	4	0,9-	37406i
38	234	1.3	-71 27	6.72	6.7	A ₀	10	..	17047b	88	697	1.8	+ 0 12	9.4	10.4	K ₀	2	..	23816b
39	885	1.4	+56 11	8.5	9.7	K ₅	1	0,1	37435i	89	1264	1.8	-50 50	9.2	10.2	K ₀	2	..	38413b
40	939	1.4	+47 27	4.03	3.86	B _{3p}	..	R	56,76	90	298	1.8	-64 20	9.1	10.2	K ₂	2	..	2043ob
41	898	1.4	+44 6	9.5	10.5	K ₀	2	..	6673m	91	306	1.9	+68 44	9.2	9.3	A ₅	4	..	38165i
42	589	1.4	+ 5 26	8.4	8.9	F ₈	3	0,3	37566i	92	681	1.9	+61 28	8.17	9.35	K ₅	1	..	37556i
43	717	1.4	-15 0	8.40	9.47	K ₂	4	..	18192b	93	763	1.9	+59 54	8.4	8.7	F ₀	3	..	37427i
44	780	1.4	-20 47	6.42	7.6	G ₅	8	..	10587b	94	..	1.9	+46 56	..	..	A ₂	3	..	7197m
45	1540	1.4	-27 56	5.57	5.71	A ₅	..	..	56,120	95	844	1.9	+46 26	9.4	10.5	K ₂	3	..	6673m
46	1588	1.4	-36 39	8.5	10.6	K ₂	3	..	39655b	96	903	1.9	+43 20	9.9	10.7	G ₅	1	..	6673m
47	319	1.4	-62 40	9.4	9.8	F ₅	3	..	23802b	97	936	1.9	+39 27	8.0	9.0	K ₀	1	..	38939i
48	740	1.5	+54 34	6.28	6.70	F ₅	6	0,9-	37427i	98	882	1.9	+37 47	5.59	6.09	F ₈	7	0,8	37451i
49	815	1.5	+41 14	7.64	7.64	A ₀	3	..	3701oi	99	726	1.9	+32 12	7.40	7.46	A ₂	3	2,3	10405i
50	825	1.5	+36 42	8.4	8.4	A ₀	3	..	38939i	100	656	1.9	+14 44	8.4	8.8	F ₅	1	..	37601i

THE HENRY DRAPER CATALOGUE.

26000

4^h 1^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	684	m. 1.9	° 2 57	10.1	10.7	G	1	..	23816b	51	937	m. 2.4	° +39 53	7.47	7.97	F8	2	..	37010i
2	787	1.9	- 8 45	8.7	9.7	Ko	2	..	12750b	52	587	2.4	- 1 11	9.9	10.5	Go	1	..	23816b
3	812	1.9	-13 28	8.7	9.2	F8	2	..	11798b	53	814	2.4	- 2 38	8.3	8.7	F5	6	..	23816b
4	820	1.9	-19 47	7.63	8.6	K5	5	..	12752b	54	782	2.4	-16 15	7.9	8.2	F2	5	..	12752b
5	750	1.9	-22 7	9.4	9.8	G5	2	..	41089b	55	754	2.4	-18 13	8.5	9.6	K2	1	..	12752b
6	749	1.9	-22 48	9.4	10.4	G5	1	..	41089b	56	784	2.4	-20 44	9.4	9.9	G5	2	..	41089b
7	1739	1.9	-23 34	8.7	9.2	G5	4	..	41089b	57	753	2.4	-21 56	8.7	8.9	Go	6	..	41089b
8	1550	1.9	-26 1	9.4	9.6	F8	4	..	41072b	58	617	2.4	-57 26	8.4	9.5	A2	2	2,1	20264b
9	1642	1.9	-29 57	8.49	9.7	Ma	3	0,2-	41072b	59	308	2.4	-59 14	8.4	9.4	K2	7	..	23802b
10	1551	1.9	-35 44	8.1	9.1	Ko	4	..	39655b	60	311	2.5	+67 44	8.6	9.6	Ko	3	..	38165i
11	1186	1.9	-48 2	11.6	9.9	Go	3	..	38413b	61	765	2.5	+60 7	9.16	10.23	K2	..	..	M
12	147	2.0	+81 43	7.33	7.33	Ao	7	..	37558i	62	885	2.5	+45 13	10.2	10.5	F2	1	..	7197m
13	242	2.0	+69 39	9.2	9.5	F2	4	..	38165i	63	668	2.5	+19 29	7.8	7.9	A2	5	1,3	37589i
14	307	2.0	+69 1	9.0	9.6	Go	3	..	38165i	64	562	2.5	+ 4 4	9.6	10.2	Go	2	..	37593i
15	657	2.0	+14 54	5.94	6.22	Fo	6	0,9	37511i	65	649	2.5	+ 2 28	8.6	9.8	K5	1	..	23816b
16	1741	2.0	-23 45	8.5	9.2	Ko	3	..	41089b	66	822	2.5	- 6 17	6.87	6.93	A2	4	0,9	10637b
17	79	2.0	-82 37	9.3	9.9	Go	2	..	20538b	67	815	2.5	- 9 1	9.1	9.9	G5	2	..	12750b
18	166	2.1	+76 3	8.22	9.00	G5	5	..	6449m	68	841	2.5	-10 2	7.02	8.02	Ko	6	..	18192b
19	165	2.1	+76 1	8.84	9.62	G5	4	0,3	6449m	69	1695	2.5	-30 56	10.4	9.4	F8	2	..	41072b
20	738	2.1	+53 37	8.0	8.5	F8	3	..	37435i	70	1603	2.5	-37 46	8.8	10.3	G5	3	..	39655b
21	884	2.1	+45 49	10.2	10.2	Ao	2	..	6673m	71	1328	2.5	-39 16	9.1	9.3	Go	4	..	39655b
22	708	2.1	+31 16	8.0	8.0	Ao	2	..	38135i	72	1280	2.5	-41 53	8.9	9.6	Ko	2	..	41076b
23	736	2.1	- 4 38	9.1	9.2	A3	3	..	10594b	73	1372	2.5	-42 14	8.4	9.3	G5	4	..	41076b
24	752	2.1	-18 19	6.75	7.93	K5	7	..	12752b	74	1293	2.5	-45 56	7.3	7.5	A5	7	..	41076b
25	1552	2.1	-35 21	8.0	9.1	Ko	4	..	39655b	75	1294	2.5	-46 24	9.5	11.3	G5	2	..	41076b
26	622	2.1	-54 32	9.5	10.1	Go	2	..	46085b	76	239	2.6	+71 52	6.15	6.93	G5	6	5,8	37555i
27	291	2.1	-63 52	9.9	10.9	Ko	3	..	23802b	77	766	2.6	+59 56	8.0	8.0	Ao	3	..	37427i
28	105	2.1	-80 22	9.1	10.3	K5	1	..	20538b	78	943	2.6	+47 15	9.4	9.4	A	1	..	37406i
29	..	2.2	+46 53	..	..	G5	1	..	7197m	79	846	2.6	+46 21	10.2	10.2	Ao	3	..	6673m
30	864	2.2	+44 19	10.2	10.2	Ao	2	..	6673m	80	829	2.6	+36 10	7.7	9.1	Ma	2	5,1	38939i
31	818	2.2	+41 15	6.90	6.98	A3	5	..	37010i	81	678	2.6	+25 38	7.40	8.40	Ko	3	..	37417i
32	796	2.2	+33 27	7.8	8.6	G5	2	..	38939i	82	651	2.6	+ 2 53	9.2	9.3	A2	1	..	37593i
33	586	2.2	- 1 21	10.6	11.1	F8	3	..	23816b	83	588	2.6	- 1 53	9.02	10.02	Ko	2	..	23816b
34	812	2.2	- 2 22	10.3	10.6	F	2	..	23816b	84	685	2.6	- 3 15	8.1	9.1	Ko	5	..	23816b
35	785	2.2	-21 51	9.7	11.0	K5	1	..	41089b	85	823	2.6	- 6 44	9.4	10.0	G	1	..	12750b
36	1728	2.2	-24 57	8.9	10.4	K5	2	3,2	41072b	86	746	2.6	- 7 13	8.8	9.6	G5	4	..	12750b
37	593	2.3	+21 45	9.0	9.4	F5	2	..	37589i	87	754	2.6	-22 15	6.58	7.3	A3	10	..	41089b
38	560	2.3	+17 4	6.13	7.13	Ko	5	0,7	37511i	88	234	2.6	-69 13	7.52	9.3	K2	6	..	20430b
39	559	2.3	+16 16	7.52	7.50	B9	4	..	37601i	89	309	2.7	+68 31	9.5	10.3	G5	1	..	38165i
40	839	2.3	-10 16	7.04	7.60	Go	8	..	18192b	90	624	2.7	+28 56	8.6	9.2	Go	4	5,3	38111i
41	1648	2.3	-30 26	9.7	10.6	G5	1	..	41072b	91	647	2.7	+13 17	8.8	9.6	G5	1	..	38110i
42	1216	2.3	-40 48	8.5	9.3	F2	4	..	39655b	92	563	2.7	+ 4 2	8.5	8.9	F5	4	0,2-	37593i
43	1261	2.3	-47 30	8.7	10.7	K2	3	..	38413b	93	747	2.7	- 7 21	9.7	10.1	F5	3	..	12750b
44	1188	2.3	-48 6	9.3	9.3	F5	4	..	38413b	94	814	2.7	-12 56	8.3	9.3	Ko	3	..	11798b
45	624	2.3	-56 4	8.9	9.5	K2	2	2,1	46085b	95	756	2.7	-22 40	9.4	9.8	A3	2	..	41089b
46	625	2.3	-56 25	8.6	9.5	Ko	2	..	12036b	96	1263	2.7	-47 4	8.1	10.4	K2	2	..	41076b
47	167	2.4	+75 34	8.62	8.96	F2	5	..	6449m	97	1008	2.7	-51 39	7.8	8.7	G5	6	..	14920b
48	776	2.4	+52 45	8.6	8.6	Ao	2	..	38981i	98	618	2.7	-57 31	8.4	10.1	Ko	1	5,1	20264b
49	845	2.4	+47 2	9.9	10.9	Ko	3	..	7197m	99	292	2.7	-63 3	9.3	10.4	K2	4	..	23802b
50	909	2.4	+43 22	9.9	10.0	A2	3	..	6673m	100	78	2.7	-83 41	9.2	9.5	F2	5	..	20538b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

26100

4^h 2^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	310	2.8	+68 16	6.41	7.41	Ko	6	..	37556i	51	1560	3.2	-27 41	8.2	8.9	Ko	4	..	41072b
2	888	2.8	+56 53	9.0	9.1	A2	1	..	37435i	52	1572	3.2	-28 57	9.7	9.4	Go	3	..	41072b
3	807	2.8	+35 47	7.71	8.21	F8	4	0,3	10405i	53	1609	3.2	-32 1	8.8	8.8	F8	4	..	12259b
4	621	2.8	+30 39	8.4	9.4	Ko	3	5,2	38111i	54	1561	3.2	-35 48	9.1	10.3	Ko	2	..	39655b
5	700	2.8	+0 57	9.44	9.72	Fo	3	..	23816b	55	1596	3.2	-36 44	8.9	10.6	Go	3	..	39655b
6	802	2.8	-11 39	9.7	10.8	K2	1	..	18192b	56	1436	3.2	-38 37	9.7	9.6	Fo	3	..	39655b
7	1697	2.8	-31 11	8.9	8.8	F8	4	0,4	41072b	57	168	3.3	+76 5	10.2	11.3	K2	1	..	6449m
8	293	2.8	-63 23	9.3	9.6	Fo	6	..	23802b	58	852	3.3	+55 39	8.6	9.8	K5	1	..	37435i
9	274	2.8	-70 33	8.8	8.8	Ao	5	..	20430b	59	1116	3.3	+49 42	9.0	9.0	Ao	3	..	37406i
10	312	2.9	+68 5	9.2	9.3	A2	4	..	38165i	60	910	3.3	+43 12	9.2	9.2	Ao	4	..	6673m
11	662	2.9	+62 47	7.42	8.20	G5	4	..	37427i	61	714	3.3	+31 22	6.94	7.36	F5	4	..	37451i
12	767	2.9	+59 49	7.96	7.96	Ao	5	..	37427i	62	672	3.3	+19 21	5.67	6.45	G5	7	5,6	37511i
13	779	2.9	+52 54	8.4	9.2	G5	2	0,1	37406i	63	543	3.3	+9 49	7.12	8.47	Ma	4	..	37566i
14	1112	2.9	+49 28	8.9	8.9	Ao	2	..	37406i	64	792	3.3	-8 5	9.4	10.2	G5	3	..	12750b
15	..	2.9	+47 2	..	..	Ao	3	..	7197m	65	1735	3.3	-25 0	8.90	9.8	Ko	3	0,3	41072b
16	624	2.9	+23 40	7.04	8.11	K2	4	0,2-	37589i	66	1332	3.3	-39 8	10.3	10.8	Go	2	..	39655b
17	844	2.9	-10 23	9.4	10.4	Ko	1	..	18192b	67	1297	3.3	-46 55	10.6	11.0	Go	2	..	38413b
18	803	2.9	-11 1	9.4	9.4	Ao	1	..	18192b	68	1215	3.3	-49 10	9.1	9.7	G5	3	..	38413b
19	720	2.9	-15 43	8.7	9.7	Ko	2	..	12752b	69	258	3.3	-75 53	8.7	9.1	F5	4	..	15162b
20	1554	2.9	-27 24	8.7	9.2	Ko	3	..	41072b	70	911	3.4	+44 3	9.9	10.0	A2	2	..	6673m
21	1608	2.9	-32 44	9.5	9.4	Fo	2	..	12259b	71	648	3.4	+13 8	6.02	6.00	B9	8	1,9	37601i
22	340	2.9	-58 27	9.0	9.9	F5	3	..	23802b	72	539	3.4	+10 12	8.92	9.70	G5	1	..	38110i
23	149	3.0	+81 11	8.4	8.5	A3	5	..	37558i	73	636	3.4	+6 31	8.4	8.4	Ao	2	..	37566i
24	429	3.0	+64 42	8.0	8.3	Fo	5	..	37556i	74	1521	3.4	-34 33	8.1	9.7	Ko	4	E	39655b
25	623	3.0	+30 23	8.6	9.6	Ko	2	..	38111i	75	1565	3.4	-35 49	8.5	9.2	G5	3	..	39655b
26	627	3.0	+28 24	9.0	9.6	Go	4	2,4	38111i	76	1333	3.4	-39 20	8.5	8.8	Fo	5	..	39655b
27	684	3.0	+26 51	8.6	9.2	Go	2	0,2	38111i	77	1267	3.4	-47 42	9.2	9.2	F5	4	E	41076b
28	637	3.0	+22 52	6.81	6.89	A3	7	2,5-	37589i	78	156	3.5	+76 17	9.5	10.5	Ko	2	..	6449m
29	576	3.0	+12 5	8.4	9.4	Ko	1	..	38110i	79	1117	3.5	+50 2	8.87	9.65	G5	2	..	37406i
30	590	3.0	-1 0	9.6	10.4	G5	2	..	23816b	80	..	3.5	+46 1	..	..	A	1	..	7197m
31	743	3.0	-4 17	8.7	9.1	F5	3	E	23816b	81	886	3.5	+45 14	8.97	9.39	F5	5	3,4	7197m
32	742	3.0	-4 27	8.5	9.6	K2	3	E	23816b	82	835	3.5	+36 22	9.1	9.7	Go	1	..	38939i
33	791	3.0	-8 13	9.4	9.8	F5	3	..	12750b	83	540	3.5	+10 40	8.8	9.2	F5	2	E	37566i
34	1569	3.0	-29 4	8.1	8.8	F2	5	..	41072b	84	701	3.5	+0 31	8.0	8.3	F2	6	0,3-	23816b
35	1282	3.0	-41 36	9.5	9.6	G5	2	..	41076b	85	688	3.5	-3 49	9.4	10.5	K2	1	..	23816b
36	1373	3.0	-42 40	8.4	9.3	F8	3	..	41076b	86	744	3.5	-4 17	8.5	8.6	A2	3	..	10594b
37	310	3.1	+66 18	9.5	10.1	Go	2	..	38165i	87	1758	3.5	-23 21	9.2	9.2	Ao	6	..	41089b
38	784	3.1	+60 58	9.5	9.6	A5	2	..	37427i	88	1657	3.5	-30 3	9.7	10.2	F8	2	..	41072b
39	904	3.1	+42 20	8.4	9.0	Go	3	0,2	38152i	89	1229	3.5	-40 33	9.1	9.3	Fo	4	..	39655b
40	809	3.1	+35 43	7.6	8.6	Ko	4	5,2	38939i	90	1302	3.5	-43 37	9.0	9.5	F8	4	..	41076b
41	561	3.1	+17 1	7.60	7.60	Ao	4	0,4	37589i	91	294	3.5	-63 0	9.1	10.1	Ko	5	..	23802b
42	1557	3.1	-33 39	9.1	9.4	G5	1	..	12259b	92	299	3.5	-65 31	9.6	10.2	Go	2	..	20430b
43	1435	3.1	-38 20	8.2	9.3	Ko	3	..	39655b	93	251	3.5	-66 47	10.9	10.9	A	2	..	20430b
44	1374	3.1	-42 38	8.3	9.1	Go	4	..	41076b	94	236	3.5	-71 25	9.5	10.5	Ko	2	R	20430b
45	155	3.2	+76 28	10.2	10.7	F8	2	..	6449m	95	191	3.6	+74 11	10.2	10.8	G	1	..	6449m
46	851	3.2	+55 35	9.0	9.1	A2	2	0,2	37435i	96	715	3.6	+58 31	8.5	9.1	Go	3	..	37427i
47	805	3.2	-11 16	9.4	9.8	F5	1	..	18192b	97	912	3.6	+43 50	8.6	8.7	A2	5	1,2	6673m
48	2102	3.2	-24 1	9.5	9.2	F5	4	..	41089b	98	907	3.6	+43 5	9.9	10.0	A5	1	..	6673m
49	1563	3.2	-25 58	9.4	10.7	Ko	2	..	41072b	99	823	3.6	+41 55	8.0	9.4	Ma	2	..	38933i
50	1564	3.2	-26 34	8.5	9.2	F5	3	..	41072b	100	848	3.6	+38 59	6.84	7.12	Fo	6	..	10405i

THE HENRY DRAPER CATALOGUE.

26200

4^h 3^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	822	3.6	- 9 16	9.4	9.9	F8	1	..	10595b	51	769	4.1	+59 12	8.2	8.2	Ao	4	0,3	37435i
2	2109	3.6	-24 4	9.1	8.9	A2	8	..	41089b	52	848	4.1	+46 39	8.0	8.4	F5	2	0,2	37406i
3	1600	3.6	-36 25	7.7	7.7	A3	6	..	39655b	53	887	4.1	+45 9	7.77	8.55	G5	4	0,3	38152i
4	1613	3.6	-37 52	10.5	11.6	K2	1	..	39655b	54	899	4.1	+40 29	8.2	8.3	A2	3	E	38152i
5	1289	3.6	-41 56	9.4	9.3	G5	3	..	41076b	55	887	4.1	+37 50	8.4	8.5	A3	2	..	38939i
6	344	3.6	-58 45	8.3	7.6	A2	8	..	23802b	56	637	4.1	+ 6 28	6.74	6.72	B9	7	1,7	37549i
7	299	3.6	-61 45	8.5	9.0	A3	7	..	23802b	57	648	4.1	- 0 7	7.8	8.3	F8	6	0,3	37593i
8	79	3.6	-83 19	8.5	9.6	K2	5	..	20538b	58	797	4.1	- 8 22	9.4	10.8	Mc	..	..	M
9	150	3.7	+81 23	7.50	7.50	Ao	6	..	37558i	59	806	4.1	-12 51	8.7	9.2	F8	3	..	18192b
10	1118	3.7	+49 22	8.7	9.0	Fo	4	..	37406i	60	790	4.1	-20 46	8.6	9.5	Ko	4	..	41089b
11	913	3.7	+43 41	9.4	10.4	Ko	2	..	6673m	61	1339	4.1	-39 49	9.5	10.4	F5	2	..	39655b
12	627	3.7	+23 48	7.22	7.30	A3	6	2,4	37589i	62	1304	4.1	-43 11	6.37	7.8	G5	8	..	41076b
13	541	3.7	+10 30	8.4	9.2	G5	3	E	37566i	63	1303	4.1	-46 34	7.9	8.3	F2	5	..	41076b
14	592	3.7	- 1 34	10.6	11.4	G5	2	..	23816b	64	1195	4.1	-48 52	9.5	9.6	Fo	3	..	38413b
15	690	3.7	- 2 57	8.5	9.5	Ko	3	..	23816b	65	652	4.1	-53 15	8.4	9.2	Ko	3	..	14920b
16	833	3.7	- 5 3	8.40	9.40	Ko	4	..	12750b	66	42	4.1	-86 30	9.4	10.2	G5	1	..	15145b
17	1564	3.7	-27 50	8.2	9.8	K2	2	..	41072b	67	129	4.2	+80 10	8.00	8.78	G5	3	..	37558i
18	1568	3.7	-35 16	9.9	10.6	G5	2	..	39655b	68	888	4.2	+37 47	8.4	8.5	A5	3	..	38939i
19	1218	3.7	-49 55	9.79	9.9	F8	3	..	38413b	69	824	4.2	+34 29	9.4	9.4	Ao	1	..	38939i
20	281	3.8	+70 58	7.92	7.92	Ao	3	..	37630i	70	831	4.2	- 6 27	9.4	10.2	G5	2	..	12750b
21	394	3.8	+65 41	8.2	9.0	G5	3	..	37556i	71	847	4.2	- 9 54	9.7	9.7	Ao	1	..	10595b
22	910	3.8	+43 6	9.2	9.2	Ao	3	..	6673m	72	809	4.2	-11 12	9.1	10.1	Ko	1	..	11798b
23	799	3.8	-17 31	8.7	9.0	Fo	4	..	12752b	73	1414	4.2	-44 16	9.7	10.4	Ao	2	..	46199b
24	2112	3.8	-24 46	9.5	10.4	G5	2	..	41089b	74	254	4.2	-66 13	9.5	10.7	K5	1	..	20430b
25	1571	3.8	-35 40	8.3	7.9	Go	5	..	39655b	75	870	4.3	+45 6	9.9	10.7	G5	1	..	7197m
26	208	3.9	+72 47	8.6	8.7	A2	3	..	37630i	76	916	4.3	+44 5	8.1	8.1	Ao	7	1,3	6673m
27	1120	3.9	+49 45	9.2	9.8	G	2	..	37406i	77	632	4.3	+23 42	7.30	8.08	G5	5	0,3	37589i
28	642	3.9	+ 4 29	8.6	9.2	Go	3	..	46180b	78	837	4.3	- 5 14	9.4	9.4	A	2	..	12750b
29	745	3.9	- 4 48	8.65	9.65	Ko	3	..	12750b	79	763	4.3	-18 13	8.1	8.4	Fo	6	..	12752b
30	1661	3.9	-30 11	9.5	9.8	Go	2	..	41072b	80	791	4.3	-20 20	8.3	9.2	G5	5	..	41089b
31	1336	3.9	-39 46	9.1	10.7	Ma	3	..	39655b	81	1670	4.3	-30 43	8.9	10.0	Go	3	..	41072b
32	243	4.0	+69 16	7.27	8.27	Ko	7	..	38165i	82	1604	4.3	-36 54	8.8	11.4	Ko	1	..	39655b
33	914	4.0	+43 51	9.9	9.9	A	1	..	7197m	83	169	4.4	+75 48	9.2	9.6	F5	3	..	6449m
34	824	4.0	+41 57	var.	var.	Ma	1	R	38933i	84	192	4.4	+74 23	10.2	11.4	K5	1	..	6449m
35	850	4.0	+38 13	7.80	7.86	A2	4	..	10405i	85	826	4.4	+41 29	7.04	8.04	Ko	4	5,3	38933i
36	829	4.0	- 6 18	9.2	10.2	Ko	2	..	12750b	86	900	4.4	+40 19	8.6	8.6	Ao	2	E	38152i
37	823	4.0	- 8 56	7.6	7.6	B9	5	1,10	10637b	87	542	4.4	+10 32	8.2	9.0	G5	2	E	37566i
38	791	4.0	-21 24	8.3	8.9	G5	6	..	41089b	88	654	4.4	+ 3 0	8.6	9.2	Go	3	..	46180b
39	760	4.0	-22 10	9.4	9.5	A5	3	..	41089b	89	792	4.4	-21 48	8.9	9.8	Ko	3	..	41089b
40	1738	4.0	-25 39	8.2	10.4	K2	2	..	41072b	90	216	4.5	+73 51	9.9	11.3	Ma	1	..	6449m
41	1415	4.0	-28 47	9.7	9.8	F8	2	..	41072b	91	816	4.5	+35 39	8.4	8.4	Ao	3	2,1	38939i
42	1618	4.0	-37 20	6.62	7.2	G5	7	..	39655b	92	655	4.5	+ 3 3	6.51	6.85	F2	6	0,9	37549i
43	1337	4.0	-39 9	9.5	10.8	Ko	2	..	39655b	93	594	4.5	- 1 19	10.6	11.8	K5	1	..	23816b
44	1406	4.0	-45 13	8.1	8.9	Go	5	..	41076b	94	798	4.5	- 8 12	7.28	7.34	A2	3	0,9	10637b
45	1273	4.0	-47 29	9.1	11.3	K5	2	..	38413b	95	821	4.5	-13 21	9.2	9.7	F8	2	..	18192b
46	1220	4.0	-49 54	7.04	7.7	Fo	10	..	38413b	96	820	4.5	-13 33	9.2	10.4	K5	1	..	18192b
47	602	4.0	-55 31	8.5	9.5	Ko	2	5,2	46085b	97	791	4.5	-16 10	7.7	8.5	G5	7	..	22166b
48	288	4.0	-60 14	9.9	11.1	K5	2	..	23802b	98	793	4.5	-16 40	8.9	9.2	Fo	7	..	22166b
49	282	4.0	-67 26	9.8	10.4	Go	2	..	20430b	99	801	4.5	-17 53	7.7	8.0	F2	6	..	12752b
50	770	4.1	+59 56	9.0	9.0	Ao	2	..	37435i	100	763	4.5	-22 7	8.9	9.3	F5	4	..	41089b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

26300

4^h 4^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1569	4.5	-33 7	7.13	7.5	A3	8	..	12259b	51	1622	4.9	-37 54	10.5	11.5	Ko	2	..	39655b
2	1570	4.5	-33 32	9.5	9.5	Fo	2	..	12259b	52	1309	4.9	-43 7	8.0	8.7	A5	5	..	41076b
3	1572	4.5	-35 24	9.9	11.7	G5	1	..	39655b	53	1275	4.9	-50 22	9.5	9.9	G5	3	..	38413b
4	1293	4.5	-41 31	8.8	9.3	Ko	3	..	41076b	54	497	4.9	-52 50	8.2	9.3	Ko	3	..	14920b
5	1013	4.5	-51 33	9.7	10.7	G5	1	..	46085b	55	291	4.9	-60 35	9.4	10.2	G5	2	..	23802b
6	628	4.5	-56 51	8.3	9.0	A5	4	..	12036b	56	104	5.0	+83 34	5.39	5.22	B3	..	2,10	56,77
7	289	4.5	-60 9	8.16	8.5	G5	7	..	23802b	57	873	5.0	+44 37	8.9	9.9	Ko	3	..	6673m
8	312	4.6	+66 17	8.8	10.0	K5	1	R	38165i	58	599	5.0	+5 20	8.8	9.6	G5	2	..	37566i
9	..	4.6	+44 47	..	..	A	1	..	7197m	59	730	5.0	-15 4	8.5	9.6	K2	2	..	22166b
10	827	4.6	+41 36	8.0	8.5	F8	2	3,2	38152i	60	805	5.0	-17 44	8.2	9.2	Ko	3	..	12752b
11	807	4.6	+33 19	5.91	6.91	Ko	6	0,4	10405i	61	806	5.0	-17 46	8.7	9.0	Fo	5	..	12752b
12	544	4.6	+10 35	8.0	8.8	G5	3	E	37566i	62	2120	5.0	-24 15	9.7	10.7	K2	1	..	41089b
13	649	4.6	-0 9	8.8	9.1	F	4	E	23816b	63	1235	5.0	-40 21	8.6	9.3	Ko	4	..	39655b
14	820	4.6	-1 57	8.4	9.4	Ko	3	..	10594b	64	1295	5.0	-41 45	9.2	9.6	Go	3	..	41076b
15	694	4.6	-3 41	9.7	10.3	Go	1	..	23816b	65	1224	5.0	-49 25	9.2	9.9	K2	3	..	38413b
16	825	4.6	-9 43	8.94	9.50	Go	3	..	12750b	66	1276	5.0	-50 32	9.9	10.2	F5	2	..	38413b
17	1574	4.6	-35 41	8.9	10.0	G5	3	..	39655b	67	63	5.1	+85 17	6.70	7.20	F8	8	..	37309i
18	302	4.6	-64 12	9.1	10.1	Ko	3	..	20430b	68	282	5.1	+70 50	8.5	9.6	K2	2	..	38165i
19	136	4.7	+79 8	8.9	9.0	A2	3	..	37558i	69	396	5.1	+65 58	8.4	9.4	Ko	3	..	38165i
20	849	4.7	+46 40	9.2	9.3	A2	4	..	6673m	70	926	5.1	+50 54	8.0	8.4	F5	4	..	37406i
21	903	4.7	+40 39	7.14	7.20	A2	3	..	37010i	71	919	5.1	+43 28	10.2	11.0	G5	2	..	6673m
22	686	4.7	+26 13	5.55	5.83	Fo	8	R	38135i	72	687	5.1	+26 15	8.7	9.3	Go	2	5,2	38135i
23	607	4.7	+7 25	8.2	8.2	B9	4	..	37566i	73	707	5.1	+1 5	8.39	9.39	Ko	5	..	23816b
24	695	4.7	-3 34	9.4	10.6	K5	2	..	23816b	74	810	5.1	-12 50	7.50	7.50	Ao	3	..	10637b
25	807	4.7	-12 16	8.6	9.0	F5	4	..	11798b	75	1412	5.1	-45 29	8.9	9.3	A5	4	..	41076b
26	796	4.7	-16 39	5.45	5.28	B3	..	2,8	56,77	76	96	5.1	-80 57	9.5	9.6	A5p	4	R	20538b
27	792	4.7	-20 33	8.6	9.2	Ko	6	..	41089b	77	193	5.2	+74 13	9.5	10.5	Ko	2	..	6449m
28	255	4.7	-66 4	9.5	10.1	Go	2	..	20430b	78	773	5.2	+59 26	9.9	9.9	A	1	..	37427i
29	850	4.8	+47 1	9.5	9.5	Ao	4	..	7197m	79	920	5.2	+43 57	9.9	9.9	Ao	3	5,3	7197m
30	852	4.8	+46 15	8.6	8.9	Fo	6	..	6673m	80	592	5.2	+15 42	7.17	7.17	Ao	5	0,8	37511i
31	851	4.8	+46 9	8.9	9.0	A2	5	..	6673m	81	1574	5.2	-33 40	9.1	10.3	Ko	1	..	12259b
32	890	4.8	+45 48	8.5	9.0	F8	6	..	6673m	82	1278	5.2	-50 26	7.6	9.0	K5	4	..	38413b
33	..	4.8	+44 40	..	..	A	1	..	7197m	83	744	5.3	+53 29	8.6	9.2	Go	2	5,2	38981i
34	581	4.8	+11 48	8.4	9.4	Ko	3	..	38110i	84	853	5.3	+46 47	9.7	10.9	K5	1	..	7197m
35	580	4.8	+11 13	8.6	8.7	A5	1	..	38110i	85	718	5.3	+31 17	7.6	7.6	Ao	3	..	37451i
36	696	4.8	-3 50	6.80	6.80	Ao	8	..	10594b	86	699	5.3	-3 24	9.1	9.2	A3	3	..	12750b
37	801	4.8	-8 10	7.08	7.64	Go	8	..	12750b	87	838	5.3	-6 19	8.7	9.2	F8	4	..	12750b
38	797	4.8	-20 59	8.7	9.2	Ko	5	..	41089b	88	1575	5.3	-26 17	7.6	9.2	K2	6	..	41072b
39	1748	4.8	-25 16	7.6	9.8	K2	4	..	41072b	89	1423	5.3	-28 4	8.7	8.6	F5	4	..	41072b
40	1532	4.8	-34 23	8.05	9.4	Ko	5	E	39655b	90	1592	5.3	-29 3	8.1	9.7	K2	3	..	41072b
41	33	4.9	+88 2	8.42	8.76	F2	4	3,3	37793i	91	1677	5.3	-30 41	9.4	9.8	Go	2	..	41072b
42	745	4.9	+54 9	7.76	8.04	Fo	4	..	37435i	92	1204	5.3	-48 36	7.8	8.5	G5	7	..	38413b
43	872	4.9	+44 25	9.9	9.9	Ao	2	..	6673m	93	1279	5.3	-50 47	9.0	9.9	K2	3	..	38413b
44	945	4.9	+40 0	8.57	9.13	Go	3	E	38152i	94	952	5.4	+47 48	9.2	9.5	F	2	..	37406i
45	594	4.9	+18 10	6.62	7.12	F8	6	..	37511i	95	916	5.4	+42 39	8.2	8.6	F5	3	..	37010i
46	644	4.9	+8 10	8.2	8.2	B9	5	..	37566i	96	842	5.4	+36 30	8.4	8.5	A5	4	..	38939i
47	793	4.9	-20 41	9.1	9.5	G5	3	..	41089b	97	676	5.4	+29 34	8.0	9.0	Ko	3	5,3	38135i
48	1771	4.9	-23 53	10.2	11.3	F5	1	..	41089b	98	567	5.4	+16 22	7.02	6.97	B8	6	..	37511i
49	1587	4.9	-29 10	7.7	8.0	F2	6	..	41072b	99	594	5.4	+15 21	7.8	7.8	Ao	6	0,4	37601i
50	1609	4.9	-36 32	10.1	10.0	F8	3	..	39655b	100	641	5.4	+7 1	9.4	9.4	A	2	..	37566i

THE HENRY DRAPER CATALOGUE.

26400

4^h 5^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	751	5.4	- 4 12	8.6	9.1	F8	3	..	12750b	51	1577	5.9	- 27 54	9.2	9.2	Ao	3	..	41072b
2	855	5.4	- 10 26	9.4	9.4	Ao	4	..	11798b	52	1349	5.9	- 38 57	9.1	9.6	Go	3	..	39655b
3	1626	5.4	- 37 52	10.1	12.2	Go	2	..	39655b	53	1208	5.9	- 47 59	9.5	10.5	Ko	2	..	38413b
4	1205	5.4	- 48 28	9.0	9.9	Ko	3	..	38413b	54	1229	5.9	- 49 39	9.5	10.7	G5	2	..	38413b
5	1226	5.4	- 49 27	9.2	9.7	Go	4	..	38413b	55	655	5.9	- 53 6	9.4	9.9	F8	1	..	46085b
6	856	5.5	+ 55 30	9.2	9.3	A2	1	..	38981i	56	129	5.9	- 79 29	8.6	8.9	Fo	3	..	20538b
7	829	5.5	+ 35 5	7.62	7.62	Ao	4	2,3	10405i	57	217	6.0	+ 73 25	9.2	9.5	F2	4	3,2	6449m
8	689	5.5	+ 26 40	9.1	9.6	F8	4	3,2	36384i	58	213	6.0	+ 72 10	8.6	8.6	Ao	3	..	37630i
9	758	5.5	- 7 11	5.60	6.38	G5	..	0,7	1669c	59	312	6.0	+ 68 43	9.7	9.8	A2	2	..	38165i
10	833	5.5	- 9 5	9.4	9.8	F5	2	..	12750b	60	857	6.0	+ 55 29	8.9	8.9	Ao	1	..	38981i
11	836	5.5	- 19 16	7.25	8.1	Ko	7	..	12752b	61	891	6.0	+ 45 32	10.2	10.3	A2	2	..	6673m
12	835	5.5	- 19 33	7.09	8.1	Ko	8	..	12752b	62	601	6.0	+ 5 16	5.71	5.99	Fo	9	0,9	37549i
13	1314	5.5	- 46 8	6.38	7.0	Fo	8	..	46199b	63	761	6.0	- 7 28	9.4	10.4	Ko	1	..	10595b
14	259	5.5	- 75 26	8.6	9.2	Go	4	..	15162b	64	837	6.0	- 9 5	5.88	6.88	Ko	8	..	10595b
15	150	5.6	+ 77 50	7.08	7.86	G5	5	0,5	37558i	65	821	6.0	- 11 36	7.9	9.0	K2	5	..	11798b
16	..	5.6	+ 46 26	..	..	Ao	2	..	7197m	66	1281	6.0	- 50 29	10.3	9.9	A2	3	..	38413b
17	838	5.6	- 18 59	8.1	8.2	F8	5	..	12752b	67	346	6.0	- 58 47	8.3	9.6	K2	4	..	23802b
18	766	5.6	- 22 33	9.4	10.4	Go	2	..	41089b	68	304	6.0	- 65 40	10.1	10.7	Go	2	..	20430b
19	293	5.6	- 60 0	8.24	9.0	F5	6	..	23802b	69	244	6.0	- 67 58	8.7	9.5	G5	7	..	20430b
20	830	5.7	+ 41 52	7.60	7.74	A5	3	..	37010i	70	855	6.1	+ 46 15	10.2	10.2	Ao	3	..	6673m
21	894	5.7	+ 37 28	8.0	8.6	Go	5	5,2	38939i	71	741	6.1	+ 32 33	9.4	9.4	Ao	2	..	38939i
22	844	5.7	+ 36 33	8.2	9.2	Ko	3	0,1	38939i	72	597	6.1	- 1 32	10.6	11.2	Go	2	..	23816b
23	681	5.7	+ 25 43	8.5	9.1	Go	2	5,1	38135i	73	843	6.1	- 5 32	7.9	8.9	Ko	4	..	12750b
24	642	5.7	+ 7 1	8.8	9.6	G5	2	..	37566i	74	1431	6.1	- 28 44	9.7	10.7	K	1	..	41072b
25	643	5.7	+ 6 28	8.6	9.4	G5	3	..	37566i	75	123	6.1	- 78 49	8.6	9.0	F5	5	0,3	15162b
26	799	5.7	- 16 9	8.9	10.0	K2	1	..	22166b	76	285	6.2	+ 70 24	8.6	9.6	Ko	2	..	38165i
27	839	5.7	- 19 22	8.7	9.2	A3	1	..	12752b	77	952	6.2	+ 40 6	8.22	8.50	Fo	2	..	38939i
28	1754	5.7	- 25 18	7.03	9.2	Ko	7	..	41072b	78	606	6.2	+ 21 17	8.7	9.0	F	2	..	37589i
29	1280	5.7	- 47 40	7.5	8.7	K2	4	..	46199b	79	1583	6.2	- 33 26	8.8	9.7	K2	2	..	41080b
30	627	5.7	- 54 2	9.7	10.7	Ko	1	..	46085b	80	1633	6.2	- 37 37	9.5	10.9	G5	3	..	39655b
31	294	5.7	- 60 43	9.4	10.8	Ma	2	..	23802b	81	1211	6.2	- 48 44	8.4	8.7	A2	6	..	38413b
32	300	5.7	- 61 29	10.7	10.8	A2	2	..	23802b	82	1059	6.3	+ 48 49	7.28	8.06	G5	4	0,2	37406i
33	236	5.7	- 69 40	9.8	9.9	A5	4	..	20430b	83	856	6.3	+ 46 9	10.2	10.3	A2	2	..	6673m
34	278	5.7	- 72 9	10.0	10.0	Ao	1	..	17047b	84	831	6.3	+ 35 2	9.22	9.22	Ao	2	..	38939i
35	922	5.8	+ 43 23	10.2	10.2	A	1	..	7197m	85	841	6.3	- 19 21	8.6	8.9	Ko	2	..	12752b
36	923	5.8	+ 43 9	9.7	9.7	Ao	2	..	6673m	86	1582	6.3	- 26 19	8.1	9.5	G5	5	..	41072b
37	845	5.8	+ 36 38	9.1	9.1	Ao	2	..	38939i	87	1545	6.3	- 34 46	7.25	8.8	Ma	6	..	39655b
38	719	5.8	+ 31 55	8.4	8.4	Ao	2	..	38135i	88	1457	6.3	- 38 53	10.8	10.8	F	2	..	39655b
39	711	5.8	+ 1 42	9.2	9.5	Fo	3	..	37593i	89	1300	6.3	- 41 34	9.5	9.9	G5	2	..	41076b
40	753	5.8	- 4 34	8.7	9.5	G5	1	..	12750b	90	629	6.3	- 54 54	9.28	9.3	F8	4	..	41013b
41	841	5.8	- 5 8	7.50	8.06	Go	8	..	12750b	91	305	6.3	- 64 30	6.44	6.2	Go	10	..	20430b
42	1581	5.8	- 33 14	7.44	8.8	Ko	4	..	41080b	92	276	6.3	- 70 8	7.67	8.1	A5	9	..	20430b
43	1612	5.8	- 36 55	7.7	9.1	G5	5	..	39655b	93	261	6.3	- 76 49	9.2	9.2	Ao	3	..	15162b
44	1019	5.8	- 51 37	9.3	9.7	G5	2	..	46085b	94	286	6.4	+ 70 12	7.79	8.86	K2	3	..	38165i
45	924	5.9	+ 43 54	8.7	8.7	Ao	5	..	6673m	95	932	6.4	+ 50 13	8.17	9.17	Ko	3	..	37406i
46	904	5.9	+ 40 24	8.0	9.1	K2	2	..	38152i	96	..	6.4	+ 45 45	..	..	G5	2	..	7197m
47	846	5.9	+ 36 48	8.8	8.8	Ao	3	0,1	38939i	97	878	6.4	+ 44 17	10.2	10.2	Ao	2	..	7197m
48	713	5.9	+ 2 4	8.0	9.4	Ma	4	0,4	37593i	98	909	6.4	+ 40 19	8.7	9.0	F2	2	..	38152i
49	701	5.9	- 2 57	9.7	10.3	Go	2	..	23816b	99	721	6.4	+ 31 32	8.4	8.4	B9	1	..	38135i
50	733	5.9	- 15 18	7.48	7.76	Fo	7	5,3	22166b	100	682	6.4	+ 25 46	8.6	9.0	F5	3	3,1	38135i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

26500

4^h 6^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	647	m. 6.4	° 5 4	8.01	8.35	F2	6	..	37566i	51	300	m. 6.8	° 63 36	9.6	10.2	Go	4	..	23802b
2	703	6.4	- 3 14	8.7	9.8	K2	2	..	23816b	52	239	6.8	- 69 31	9.7	9.8	A3	4	..	20430b
3	704	6.4	- 3 31	8.7	9.8	K2	2	..	12750b	53	785	6.9	+ 57 13	6.09	6.15	A2	6	0,7-	37427i
4	832	6.4	- 14 38	7.91	9.09	K5	5	..	22166b	54	..	6.9	+ 45 50	..	..	F8	2	..	7197m
5	1583	6.4	- 26 53	8.9	9.2	G5	4	..	41072b	55	650	6.9	+ 4 55	8.90	9.68	G5	1	..	46180b
6	1250	6.4	- 40 7	9.7	10.2	A3	2	..	39655b	56	825	6.9	- 11 11	9.2	9.3	A5	2	..	11798b
7	1320	6.4	- 43 53	8.9	9.2	A2	4	..	46199b	57	1607	6.9	- 29 14	8.9	10.3	G5	2	..	41072b
8	322	6.4	- 62 23	10.2	10.8	G	1	..	23802b	58	1606	6.9	- 29 19	8.1	9.7	Go	3	..	41072b
9	97	6.4	- 81 41	9.2	9.3	A3	5	..	20538b	59	1253	6.9	- 40 36	10.1	8.8	A2	4	..	41076b
10	46	6.4	- 88 54	8.7	9.7	Ko	3	..	15145b	60	1396	6.9	- 42 53	7.7	9.1	G5	4	..	41076b
11	194	6.5	+ 74 23	8.2	9.3	K2	5	0,2	6449m	61	1236	6.9	- 49 24	9.2	10.7	K2	2	..	38413b
12	749	6.5	+ 54 15	7.10	7.10	Ao	7	0,7	37406i	62	1234	6.9	- 49 42	9.3	10.2	G5	2	..	38413b
13	883	6.5	+ 51 34	8.6	8.6	A	2	..	37406i	63	1286	6.9	- 50 13	9.7	9.9	F5	3	..	38413b
14	642	6.5	+ 23 20	7.20	7.08	G5	5	0,3	37589i	64	347	6.9	- 58 45	9.6	9.6	Ao	3	..	23802b
15	663	6.5	+ 14 41	8.8	9.4	Go	2	..	37511i	65	257	6.9	- 66 43	8.2	9.0	G5	7	..	20430b
16	653	6.5	- 0 41	6.75	7.75	Ko	6	0,5	37593i	66	1061	7.0	+ 48 47	9.4	9.7	F	1	..	37406i
17	738	6.5	- 15 2	9.55	9.97	F5	2	..	22166b	67	893	7.0	+ 45 46	9.4	10.4	Ko	3	..	6673m
18	1763	6.5	- 25 21	7.28	8.0	F8	8	..	41072b	68	926	7.0	+ 43 33	9.0	9.0	Ao	4	..	6673m
19	1762	6.5	- 25 41	7.7	8.6	F5	7	..	41072b	69	921	7.0	+ 42 19	8.0	8.3	Fo	3	..	37010i
20	1687	6.5	- 30 32	8.5	9.1	A2	4	..	41072b	70	956	7.0	+ 39 26	7.65	8.83	K5	2	..	38152i
21	1303	6.5	- 41 51	10.5	10.2	A	2	..	41076b	71	649	7.0	+ 22 9	6.16	6.11	B8	7	0,8	37417i
22	1284	6.5	- 47 42	8.0	9.3	Ko	3	..	46199b	72	675	7.0	+ 19 16	7.8	7.9	A2	4	E	37511i
23	624	6.5	- 57 37	9.1	10.1	Ko	1	..	20264b	73	710	7.0	+ 0 29	6.76	7.54	G5	4	0,8-	37549i
24	299	6.5	- 63 2	8.8	9.2	F5	7	..	23802b	74	764	7.0	- 7 6	4.14	4.48	F2	..	R	1669c
25	314	6.6	+ 67 35	9.9	10.0	A5	2	..	38165i	75	1588	7.0	- 35 32	6.35	7.2	G5	9	5,8	12259b
26	743	6.6	+ 32 16	6.88	7.88	Ko	3	5,3	37451i	76	500	7.0	- 52 40	8.8	9.7	F8	3	..	46085b
27	654	6.6	- 0 9	8.8	9.8	Ko	2	E	23816b	77	301	7.0	- 63 22	10.4	10.7	Fo	3	..	23802b
28	840	6.6	- 6 14	9.4	9.7	Fo	3	..	12750b	78	306	7.0	- 64 52	8.4	9.2	G5	3	..	20430b
29	769	6.6	- 18 41	8.1	8.5	F5	6	..	12752b	79	195	7.1	+ 74 22	8.0	8.0	Ao	6	0,8-	37630i
30	634	6.6	- 56 49	8.5	9.5	Ko	2	..	12036b	80	217	7.1	+ 72 9	7.78	8.85	K2	2	..	37630i
31	151	6.7	+ 78 46	8.2	8.2	Ao	5	..	37558i	81	724	7.1	+ 58 16	8.8	9.8	Ko	2	2,1	37427i
32	925	6.7	+ 43 19	10.2	10.7	F8	2	..	7197m	82	880	7.1	+ 44 19	9.9	10.0	A2	2	..	7197m
33	954	6.7	+ 39 49	8.4	8.7	Fo	1	..	38939i	83	563	7.1	+ 12 12	8.6	9.2	Go	2	..	38110i
34	763	6.7	- 7 14	9.4	10.8	Mb	..	..	M	84	843	7.1	- 9 6	6.59	7.37	G5	8	..	10595b
35	798	6.7	- 20 19	8.9	10.5	Mb	2	..	41089b	85	805	7.1	- 21 27	9.7	10.5	G5	1	..	41089b
36	1788	6.7	- 23 38	9.4	9.5	Fo	4	..	41089b	86	1254	7.1	- 40 48	7.7	8.1	A3	8	..	39655b
37	1636	6.7	- 37 24	10.1	11.2	Go	2	..	39655b	87	881	7.2	+ 44 30	7.7	7.8	A5	7	2,7	7197m
38	1251	6.7	- 40 30	10.1	10.8	Ko	2	..	39655b	88	651	7.2	+ 4 33	8.8	9.6	G5	2	..	37593i
39	1393	6.7	- 42 11	8.7	9.3	G5	3	..	41076b	89	807	7.2	- 8 25	9.2	9.2	Ao	4	..	10595b
40	287	6.7	- 67 26	9.3	10.1	G5	3	..	20430b	90	800	7.2	- 20 36	7.71	8.2	F2	7	..	41089b
41	277	6.7	- 70 30	10.0	10.0	Ao	3	..	20430b	91	801	7.2	- 20 37	5.80	5.80	Ao	5	..	42139b
42	137	6.8	+ 79 9	8.9	9.0	A2	3	..	37558i	92	1556	7.2	- 34 22	8.5	8.5	Fo	5	..	41080b
43	315	6.8	+ 67 10	8.8	8.9	A2	3	..	38165i	93	323	7.2	- 62 35	9.9	10.4	F8	2	..	23802b
44	823	6.8	+ 35 13	7.57	7.57	Ao	4	0,3	10405i	94	249	7.2	- 73 33	8.8	8.9	A3	4	1,3	20540b
45	645	6.8	+ 23 15	8.0	9.1	K2	3	..	37589i	95	125	7.2	- 78 54	6.70	7.9	Ko	7	0,9-	14359b
46	569	6.8	+ 17 2	6.30	7.08	G5	6	..	37511i	96	751	7.3	+ 54 44	8.0	8.5	F8	3	2,2	37435i
47	546	6.8	+ 9 24	7.8	8.1	Fo	5	..	37566i	97	894	7.3	+ 45 58	9.2	9.3	A2	4	..	6673m
48	648	6.8	+ 4 26	9.2	10.0	G5	1	..	46180b	98	548	7.3	+ 10 56	8.0	8.3	F2	3	..	37566i
49	807	6.8	- 16 14	7.12	8.19	K2	7	..	22166b	99	762	7.3	- 4 12	8.9	9.5	Go	3	..	12750b
50	1233	6.8	- 49 53	9.29	9.9	F5	4	..	38413b	100	844	7.3	- 9 32	8.7	9.3	Go	3	..	10595b

THE HENRY DRAPER CATALOGUE.

26600

4^h 7^m 3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1766	7.3	-25 24	var.	var.	Md	..	R	56,198	51	1774	7.8	-25 53	9.7	10.2	Go	1	..	41072b
2	303	7.3	-61 26	10.0	10.8	G5	2	..	23802b	52	1591	7.8	-26 23	9.4	9.6	F5	2	..	41072b
3	940	7.4	+50 59	8.9	9.0	A2	3	..	37406i	53	295	7.8	-60 34	8.2	10.0	K5	3	..	23802b
4	861	7.4	+38 13	7.42	7.70	Fo	4	..	10405i	54	240	7.8	-69 19	9.4	9.8	F5	3	..	20430b
5	897	7.4	+37 43	6.55	7.33	G5	7	..	10405i	55	928	7.9	+43 17	9.2	9.6	F5	3	..	6673m
6	652	7.4	+ 4 46	8.2	9.0	G5	6	0,5	37566i	56	667	7.9	+14 18	8.6	9.2	Go	2	..	37511i
7	718	7.4	+ 1 49	8.4	9.2	G5	1	..	37593i	57	1599	7.9	-27 49	9.4	9.8	Go	3	..	41072b
8	763	7.4	- 4 40	6.94	8.12	K5	7	..	12750b	58	1694	7.9	-30 36	8.9	9.7	G5	3	..	41072b
9	858	7.4	-10 44	8.8	9.6	G5	4	..	11798b	59	113	8.0	+83 6	5.70	6.48	G5	..	0,8	56,77
10	807	7.4	-21 41	8.3	8.6	A3	4	3,6	46166b	60	197	8.0	+74 25	9.0	10.2	K5	4	..	6449m
11	1594	7.4	-27 1	9.1	9.8	Go	3	..	41072b	61	834	8.0	- 2 11	9.4	10.4	Ko	2	..	23816b
12	1400	7.4	-42 15	4.85	5.13	Fo	..	R	28,197	62	770	8.0	- 4 34	7.95	8.73	G5	5	..	12750b
13	1429	7.4	-45 46	8.4	9.2	G5	5	..	41076b	63	847	8.0	- 6 38	7.10	8.10	Ko	6	..	10595b
14	657	7.4	-53 6	9.4	9.8	F5	2	..	46085b	64	1695	8.0	-30 30	8.9	9.1	A5	4	..	41072b
15	625	7.4	-57 55	9.1	10.1	Ko	1	..	20264b	65	1291	8.0	-47 12	7.0	7.8	F5	7	..	41076b
16	305	7.4	-65 50	7.9	8.9	Ko	5	..	20430b	66	296	8.0	-60 39	9.8	10.2	F5	2	..	23802b
17	218	7.5	+72 58	9.4	10.2	G5	2	..	38165i	67	R	8.0	-70 3	..	..	R3	..	..	M
18	317	7.5	+67 16	9.5	9.6	A3	2	..	38165i	68	260	8.0	-75 48	9.1	9.2	A3	2	..	46167b
19	779	7.5	+59 41	8.9	8.9	B8	3	..	37427i	69	316	8.1	+66 51	6.94	6.89	B8	8	..	37556i
20	941	7.5	+50 26	7.72	8.72	Ko	3	..	37406i	70	687	8.1	+61 36	5.64	5.59	B8	..	..	56,77
21	927	7.5	+43 26	10.2	10.8	Go	1	..	6673m	71	896	8.1	+46 3	8.0	8.4	F5	3	3,2-	37406i
22	648	7.5	+ 8 52	8.8	9.1	F2	2	..	37566i	72	888	8.1	+45 2	10.2	10.3	A5	2	..	6673m
23	711	7.5	+ 0 29	9.2	9.7	F8	2	..	46180b	73	912	8.1	+40 14	4.89	5.45	Go	..	0, R	56,77
24	832	7.5	-13 29	7.9	7.9	Ao	7	0,2	22166b	74	912	8.1	+40 14	4.89	5.45	A5	..	0, R	56,77
25	816	7.5	-17 32	6.58	7.58	Ko	4	0,4	8862b	75	654	8.1	+22 27	8.08	8.08	Ao	3	..	37589i
26	772	7.5	-18 8	8.5	9.5	Ko	3	..	22166b	76	549	8.1	+ 9 58	6.25	6.20	B8	8	..	37566i
27	809	7.5	-21 1	9.7	11.3	K5	1	..	41089b	77	651	8.1	+ 8 38	6.45	6.53	A3	..	3,8	56,77
28	2142	7.5	-24 55	9.2	10.1	Go	2	..	41089b	78	661	8.1	+ 2 37	8.4	8.8	F5	4	5,3	37593i
29	1064	7.6	+48 48	9.4	9.5	A3	1	..	37405i	79	835	8.1	- 2 50	9.9	10.7	G5	2	..	23816b
30	1063	7.6	+48 9	4.28	4.84	Go	..	0, R	1681c	80	2145	8.1	-24 10	9.7	10.7	K5	1	..	41089b
31	883	7.6	+44 57	9.27	9.55	Fo	4	..	6673m	81	1625	8.1	-36 10	10.8	11.7	G	1	..	39655b
32	884	7.6	+44 40	9.9	9.9	Ao	2	..	7197m	82	1624	8.1	-36 18	10.8	10.9	G	2	..	39655b
33	832	7.6	- 2 47	7.6	8.6	Ko	4	..	37593i	83	661	8.1	-53 51	9.2	9.9	F8	4	..	41013b
34	837	7.6	-13 53	8.1	9.1	Ko	4	..	22166b	84	173	8.2	+75 52	6.63	6.51	B5	6	3,7-	37630i
35	1599	7.6	-33 36	9.2	10.0	A	1	..	41080b	85	781	8.2	+60 4	8.86	8.92	A2	2	..	37427i
36	324	7.6	-62 49	9.3	9.6	Fo	7	..	23802b	86	890	8.2	+44 31	7.23	7.23	Ao	5	..	37010i
37	196	7.7	+74 58	8.67	8.81	A5	3	3,6	37555i	87	891	8.2	+44 27	9.4	10.4	Ko	2	..	7197m
38	886	7.7	+45 7	9.32	9.38	A2	4	..	6673m	88	727	8.2	+31 39	8.6	9.6	K	..	..	M
39	887	7.7	+44 29	9.7	9.8	A2	3	..	6673m	89	728	8.2	+31 35	8.6	8.6	A	2	..	38135i
40	719	7.7	+ 1 39	7.6	8.6	Ko	5	0,2	37593i	90	617	8.2	+ 7 28	5.35	5.63	Fo	8	0,9	37566i
41	767	7.7	- 4 23	9.4	9.5	A2	3	..	12750b	91	572	8.2	+ 3 39	8.6	9.8	K5	1	..	37593i
42	802	7.7	-20 45	9.7	11.3	K5	1	..	41089b	92	771	8.2	- 4 8	7.74	9.09	Ma	5	..	12750b
43	349	7.7	-58 50	9.2	9.9	F5	2	..	23802b	93	829	8.2	-11 23	8.8	9.8	K	1	..	11798b
44	126	7.7	-78 11	9.1	9.5	F5	5	0,3	15162b	94	821	8.2	-16 55	9.1	10.1	K	1	..	22166b
45	172	7.8	+75 26	10.2	11.3	K2	1	..	6449m	95	804	8.2	-20 35	9.7	10.5	K2	2	..	41089b
46	780	7.8	+59 22	8.6	8.6	A	2	..	37435i	96	1602	8.2	-27 19	9.5	9.8	F5	3	..	41072b
47	1065	7.8	+48 55	8.5	8.6	A5	3	..	37406i	97	1696	8.2	-30 42	7.94	9.1	Ko	4	..	41072b
48	895	7.8	+45 47	8.8	10.0	K5	2	..	6673m	98	1564	8.2	-34 1	9.1	10.6	Ko	2	..	12259b
49	768	7.8	- 7 5	9.2	10.3	K2	2	..	10595b	99	1626	8.2	-36 14	10.3	11.7	G5	1	..	39655b
50	860	7.8	-10 50	8.5	8.6	A5	5	..	11798b	100	632	8.2	-54 11	10.1	10.4	F	2	..	41013b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

26700

4^h 8^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	305	8.2	-61 41	9.8	11.0	K5	2	..	23802b	51	823	8.7	-12 33	8.3	9.5	K5	3	..	11798b
2	899	8.3	+37 17	6.58	7.36	G5	7	..	10405i	52	1263	8.7	-40 44	9.9	10.0	G5	2	..	39655b
3	564	8.3	+12 30	6.49	7.49	Ko	5	..	37511i	53	1296	8.7	-47 21	7.1	7.8	G5	6	..	41076b
4	774	8.3	-4 31	8.7	9.5	G5	3	..	12750b	54	307	8.7	-61 51	6.9	7.5	Go	10	..	23802b
5	99	8.3	-81 27	9.3	9.9	G	2	..	20538b	55	787	8.8	+57 37	5.80	6.80	Ko	6	0,5-	37427i
6	318	8.4	+67 19	9.2	10.2	Ko	1	..	38165i	56	673	8.8	+14 22	8.47	9.25	G5	2	..	37511i
7	926	8.4	+43 4	9.7	10.5	G5	2	..	6673m	57	1810	8.8	-23 23	6.64	7.8	Fo	6	..	41089b
8	857	8.4	+36 15	7.54	7.60	A2	6	..	10405i	58	1631	8.8	-36 24	6.98	7.5	F5	6	..	39655b
9	649	8.4	+27 42	8.1	8.4	F2	4	2,3	38111i	59	1475	8.8	-37 56	9.4	9.6	F5	4	..	39655b
10	685	8.4	+26 0	7.6	8.4	G5	6	..	38111i	60	1265	8.8	-40 12	10.1	10.4	A	2	..	41076b
11	598	8.4	+18 37	7.8	8.1	Fo	4	..	37511i	61	1235	8.8	-48 14	9.0	9.3	Fo	5	..	38413b
12	805	8.4	-20 11	9.4	10.1	K5	2	..	41089b	62	633	8.8	-54 18	8.2	8.7	F2	6	..	41013b
13	1605	8.4	-27 11	9.4	9.8	Go	3	..	41072b	63	690	8.9	+62 6	7.37	8.72	Ma	2	..	37427i
14	1602	8.4	-35 13	8.5	10.0	K2	3	..	39655b	64	750	8.9	+53 23	5.12	5.18	A2	..	2,R	56,77
15	350	8.4	-58 2	10.1	10.2	A2	2	..	20264b	65	794	8.9	+52 26	8.9	8.9	Ao	1	..	37406i
16	219	8.5	+73 41	9.0	9.1	A2	4	3,1	6449m	66	678	8.9	+29 39	7.26	8.26	Ko	5	0,7	38135i
17	669	8.5	+62 20	8.0	8.6	Go	2	..	37556i	67	566	8.9	+12 12	8.3	8.9	Go	2	E	37511i
18	689	8.5	+61 33	7.9	8.9	Ko	3	..	37427i	68	659	8.9	-0 45	8.6	9.8	K5	2	..	23816b
19	648	8.5	+23 27	7.05	8.05	Ko	6	..	37589i	69	1597	8.9	-26 42	7.7	8.9	F8	4	..	41072b
20	679	8.5	+19 19	8.2	8.7	F8	3	..	37589i	70	1457	8.9	-28 48	7.44	7.6	F8	8	..	41072b
21	550	8.5	+10 47	7.8	7.9	A2	5	1,4	37566i	71	1701	8.9	-30 34	8.0	9.7	K2	4	..	41072b
22	652	8.5	+9 1	4.98	5.76	G5	..	5,10	56,77	72	1633	8.9	-36 1	11.5	11.4	F5	2	..	39655b
23	849	8.5	-9 44	8.96	9.38	F5	3	..	10595b	73	1632	8.9	-36 24	8.8	7.9	F5	5	..	39655b
24	840	8.5	-14 35	8.5	8.6	A2	4	..	22166b	74	78	9.0	+84 14	7.41	8.48	K2	5	..	37309i
25	2152	8.5	-24 9	9.2	9.8	Ko	2	..	41072b	75	893	9.0	+51 7	8.7	8.7	A	3	..	37406i
26	1781	8.5	-25 3	9.5	9.8	A2	2	..	41089b	76	899	9.0	+45 53	8.08	9.15	K2	5	..	6673m
27	1453	8.5	-28 14	9.5	10.4	K2	2	..	41072b	77	1783	9.0	-25 33	8.9	10.4	Ko	3	..	41072b
28	1615	8.5	-29 21	8.1	8.9	A5	4	..	41072b	78	1300	9.0	-47 34	8.7	9.2	Ko	3	..	41076b
29	1739	8.5	-31 50	7.47	8.2	G5	6	..	41080b	79	502	9.0	-52 22	8.4	9.7	Ko	3	..	41013b
30	1375	8.5	-39 7	8.1	9.6	Ko	3	..	39655b	80	174	9.1	+75 41	9.4	10.6	K5	1	..	6449m
31	1444	8.5	-44 53	9.50	9.8	F5	2	..	41076b	81	198	9.1	+74 54	10.2	11.3	K2	1	..	6449m
32	1435	8.5	-45 29	9.2	10.4	Ko	2	..	41076b	82	838	9.1	+41 21	8.4	8.4	Ao	2	..	38152i
33	242	8.5	-68 58	9.0	9.3	Fo	6	..	20430b	83	652	9.1	+24 4	9.1	9.1	A	3	..	37589i
34	315	8.6	+68 21	9.7	10.1	F5	2	..	38165i	84	551	9.1	+10 27	7.11	7.53	F5	6	0,4	37566i
35	898	8.6	+45 9	8.02	8.80	G5	7	5,3 R	6673m	85	1613	9.1	-33 24	9.9	9.8	Ko	2	..	41080b
36	649	8.6	+23 20	8.0	8.8	G5	4	..	37589i	86	1412	9.1	-42 56	9.2	9.6	F8	2	..	46199b
37	657	8.6	+22 12	7.00	7.34	F2	6	..	37589i	87	1440	9.1	-45 14	9.7	9.5	F5	3	..	41076b
38	663	8.6	+2 51	9.2	9.2	Ao	1	..	46180b	88	308	9.1	-61 2	9.0	10.5	Ko	3	..	23802b
39	600	8.6	-1 24	6.34	6.22	B5	7	0,8	37549i	89	259	9.1	-66 18	8.8	9.6	G5	4	..	20430b
40	807	8.6	-20 6	8.9	9.2	F5	4	..	41089b	90	790	9.2	+60 9	9.06	9.06	Ao	1	..	37435i
41	812	8.6	-21 37	8.7	9.5	Ko	3	..	41089b	91	726	9.2	+58 52	9.2	9.6	F5	3	5,2	37427i
42	2153	8.6	-24 5	6.73	8.3	K2	8	0,8	41072b	92	899	9.2	+56 56	6.57	6.52	B8	5	2,8	37426i
43	1570	8.6	-34 28	9.5	10.9	A	2	..	39655b	93	550	9.2	+9 46	5.15	5.10	B8	..	0,10	56,77
44	1439	8.6	-45 4	9.54	10.4	G	1	..	41076b	94	665	9.2	+2 45	9.2	10.2	Ko	2	..	37593i
45	893	8.7	+44 26	8.0	8.0	B9	7	1,3	6673m	95	721	9.2	+2 0	8.4	9.4	Ko	3	..	37593i
46	837	8.7	+41 36	8.0	8.3	Fo	2	..	37010i	96	722	9.2	+1 24	7.8	8.6	G5	5	..	37593i
47	636	8.7	+30 35	8.8	8.8	Ao	2	0,2	38111i	97	825	9.2	-17 44	8.7	8.8	A3	4	..	22166b
48	672	8.7	+14 18	7.92	8.92	Ko	1	..	37511i	98	776	9.2	-21 58	9.4	10.1	F5	2	..	41089b
49	583	8.7	+12 6	6.90	7.46	Go	6	0,4	37566i	99	1614	9.2	-33 3	7.06	7.9	A3	7	..	41080b
50	863	8.7	-10 38	7.7	9.1	Mb	4	..	11798b	100	1448	9.2	-44 27	9.3	9.5	F5	3	..	41076b

THE HENRY DRAPER CATALOGUE.

26800

4^h 9^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	692	m. 9.3	° 40	7.37	7.35	B9	5	..	37556i	51	1578	m. 9.6	° 49	9.1	11.2	G5	2	..	39655b
2	610	9.3	+21 50	8.61	8.61	A	2	..	37589i	52	1481	9.6	-38 15	8.1	9.9	K2	3	..	39655b
3	662	9.3	- 0 36	8.8	8.8	Ao	2	2,2	10594b	53	1321	9.6	-41 14	9.7	9.6	G5	2	..	41076b
4	603	9.3	- 1 53	8.52	9.52	Ko	2	..	37593i	54	1445	9.6	-44 56	8.64	8.7	Fo	6	..	41076b
5	841	9.3	- 2 45	8.9	9.7	G5	1	..	10594b	55	1444	9.6	-45 37	8.0	9.0	K2	4	..	41076b
6	782	9.3	-18 19	8.5	9.5	Ko	2	..	22166b	56	309	9.6	-65 35	8.8	9.8	Ko	3	..	20430b
7	1744	9.3	-31 32	8.1	8.5	A5	5	..	12259b	57	963	9.7	+50 37	6.88	7.95	K2	3	..	37406i
8	1656	9.3	-37 47	8.8	10.0	G5	4	..	39655b	58	896	9.7	+45 0	9.7	11.1	Ma	1	..	6673m
9	1248	9.3	-49 14	8.4	9.6	G5	5	..	38413b	59	933	9.7	+43 17	10.2	11.0	G5	1	..	7197m
10	432	9.4	+65 0	8.18	8.96	G5	1	..	37556i	60	848	9.7	+34 38	7.72	7.80	A3	5	..	10405i
11	798	9.4	+53 6	8.0	9.0	Ko	2	..	38981i	61	620	9.7	+ 7 9	8.2	8.8	Go	4	..	37566i
12	900	9.4	+45 24	10.2	10.3	A2	2	..	7197m	62	1640	9.7	-36 9	9.7	11.9	G5	2	..	39655b
13	895	9.4	+45 3	9.9	10.2	F2	2	..	7197m	63	1278	9.7	-40 1	9.40	10.5	G5	2	..	39655b
14	734	9.4	+31 28	9.5	10.5	K	..	R	56,233	64	1303	9.7	-47 49	8.9	9.2	Go	3	..	46199b
15	733	9.4	+31 8	7.8	7.8	A	3	R	38135i	65	1238	9.7	-48 24	10.6	10.7	F5	2	..	38413b
16	654	9.4	+23 51	8.8	10.2	Mb	3	..	37589i	66	1250	9.7	-49 29	9.9	10.2	F5	2	..	38413b
17	1786	9.4	-25 48	7.7	8.9	Ko	7	..	41072b	67	326	9.7	-62 42	9.1	10.2	K2	3	..	23802b
18	1635	9.4	-36 7	11.0	12.2	G	1	..	39655b	68	310	9.7	-65 3	9.9	10.4	F8	2	..	20430b
19	1451	9.4	-44 8	8.3	9.5	Ko	3	..	41076b	69	311	9.7	-65 28	10.2	11.3	K2	1	..	20430b
20	1450	9.4	-44 37	6.66	8.0	Ko	7	..	41076b	70	290	9.7	-67 35	9.2	9.8	Go	6	..	20430b
21	1249	9.4	-49 4	8.4	10.3	K2	3	..	38413b	71	858	9.8	+46 57	10.2	10.7	F8	3	..	7197m
22	503	9.4	-52 41	8.0	8.7	F8	5	..	41013b	72	859	9.8	+36 29	8.0	8.5	F8	2	..	38939i
23	249	9.4	-71 54	8.4	8.9	F8	4	..	17047b	73	682	9.8	+29 47	7.46	8.02	Go	6	0,5	38111i
24	857	9.5	+46 30	7.9	7.9	B9	5	0,3-	37406i	74	721	9.8	+20 34	8.1	8.7	Go	3	..	37589i
25	603	9.5	+18 43	8.4	9.4	Ko	1	..	37589i	75	667	9.8	+ 3 0	8.4	8.4	Ao	6	0,7	37549i
26	717	9.5	+ 0 25	9.2	9.7	F8	1	..	46180b	76	815	9.8	-21 20	9.4	9.9	Go	2	..	41089b
27	773	9.5	- 7 13	8.7	9.7	Ko	3	..	10595b	77	1620	9.8	-33 45	7.7	9.5	F8	3	..	41080b
28	745	9.5	-15 17	8.6	9.6	K	1	R	22166b	78	1485	9.8	-38 29	9.5	9.3	A5	4	..	39655b
29	814	9.5	-16 15	7.65	9.00	Ma	4	..	22166b	79	1484	9.8	-38 54	9.4	10.5	Ko	2	..	39655b
30	777	9.5	-22 45	9.1	9.2	Ao	4	..	41089b	80	1386	9.8	-39 7	10.1	10.8	Ko	1	..	39655b
31	1609	9.5	-27 55	9.4	11.0	Ko	1	..	41072b	81	319	9.9	+67 38	8.5	9.0	F8	3	..	37556i
32	1638	9.5	-36 48	7.7	10.0	Ma	4	..	39655b	82	792	9.9	+60 14	7.41	7.39	B9	6	1,6-	37427i
33	664	9.5	-53 40	6.9	8.0	Ko	7	..	41013b	83	962	9.9	+39 47	7.97	8.97	Ko	2	..	38152i
34	628	9.5	-57 12	8.4	9.8	Ko	1	..	12036b	84	656	9.9	+ 8 11	8.8	8.8	Ao	2	..	37566i
35	58	9.5	-87 38	9.4	9.5	A2	4	..	15145b	85	575	9.9	+ 3 42	8.4	8.4	Ao	6	1,6	37593i
36	133	9.6	+80 35	5.58	6.58	Ko	..	5,10	2503c	86	604	9.9	- 1 15	8.4	9.2	G5	4	..	37593i
37	200	9.6	+74 8	8.9	10.0	K2	4	..	6449m	87	857	9.9	- 5 39	8.6	9.1	F8	3	..	10595b
38	248	9.6	+70 5	9.4	9.5	A2	2	..	38165i	88	1388	9.9	-39 25	8.8	9.3	Go	3	..	39655b
39	727	9.6	+58 32	6.91	6.91	Ao	6	0,4-	37427i	89	1282	9.9	-40 19	11.0	10.2	F8	2	..	39655b
40	902	9.6	+45 23	9.5	10.0	F8	3	..	6673m	90	318	9.9	-59 25	7.7	8.4	F5	4	..	12036b
41	738	9.6	+31 29	9.0	9.5	F8	..	..	56,233	91	309	9.9	-61 38	8.7	10.0	Ko	4	..	23802b
42	737	9.6	+31 27	7.40	7.90	F8	5	..	38135i	92	305	9.9	-63 25	9.0	9.3	Fo	5	..	23802b
43	552	9.6	+10 29	7.9	8.0	A2	6	0,4	37566i	93	158	10.0	+76 21	8.72	9.79	K2	4	..	6449m
44	574	9.6	+ 3 7	8.4	9.4	Ko	2	..	46180b	94	491	10.0	+63 43	8.0	8.3	Fo	6	R	37556i
45	844	9.6	- 2 23	7.9	9.1	K5	1	..	46180b	95	751	10.0	+53 44	8.2	9.2	Ko	2	..	38981i
46	867	9.6	-10 30	5.13	6.13	Ko	10	R	11798b	96	801	10.0	+52 53	8.2	8.2	Ao	2	..	38981i
47	842	9.6	-13 0	Neb.	Neb.	Pd	..	R	76,21	97	859	10.0	+46 27	7.9	9.0	K2	2	0,1-	37406i
48	843	9.6	-13 29	8.8	9.6	G5	2	..	11798b	98	903	10.0	+45 46	10.2	11.2	Ko	1	..	7197m
49	844	9.6	-14 8	8.7	9.7	Ko	1	..	22166b	99	897	10.0	+44 27	9.9	10.9	Ko	1	..	7197m
50	815	9.6	-16 48	8.9	10.3	Ma	2	..	22166b	100	860	10.0	+36 16	8.34	9.41	K2	3	2,2	38939i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

26900

4^h 10^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	776	10.0	- 7 26	9.2	9.3	A3	3	..	10595b	51	263	10.5	- 76 7	8.9	9.5	Go	3	..	15162b
2	872	10.0	-10 50	8.2	9.2	Ko	4	..	11798b	52	761	10.6	+33 0	8.1	9.1	Ko	2	..	38939i
3	2171	10.0	-24 27	7.6	8.6	A5	6	0,7	41072b	53	658	10.6	+ 8 48	9.2	9.2	Ao	3	..	37566i
4	1633	10.0	-29 19	9.2	9.8	G5	2	..	41072b	54	819	10.6	-16 27	8.9	9.0	A5	5	..	22166b
5	220	10.1	+73 21	8.9	8.9	Ao	6	0,2	6449m	55	2181	10.6	-24 55	9.2	10.1	F8	2	..	41089b
6	904	10.1	+45 58	8.6	8.4	Bp	7	R	6673m	56	1795	10.6	-25 15	8.7	9.8	G5	3	..	41072b
7	905	10.1	+45 57	7.17	7.23	A2	6	1,4	37406i	57	1643	10.6	-36 28	9.5	10.0	G5	3	..	39655b
8	898	10.1	+44 50	9.7	10.1	F5	1	..	7197m	58	1254	10.6	-49 22	8.3	9.0	Ko	6	..	38413b
9	900	10.1	+44 41	10.2	10.7	F8	3	..	7197m	59	1311	10.6	-50 23	9.9	10.7	G5	1	..	38413b
10	663	10.1	+22 43	9.1	9.1	A	3	..	37589i	60	638	10.6	-54 16	8.7	9.8	F5	3	..	41013b
11	603	10.1	+15 9	6.35	6.77	F5	8	..	37511i	61	1150	10.7	+50 3	4.57	4.63	A2	..	2,8 R	56,77
12	657	10.1	+ 8 39	4.32	4.15	B3	..	R	56,77	62	624	10.7	+ 7 18	9.2	9.7	F8	2	..	37566i
13	613	10.1	+ 5 57	7.16	7.72	Go	5	..	37566i	63	607	10.7	- 1 50	8.87	9.87	K	1	R	10594b
14	605	10.1	- 1 27	8.8	9.9	K2	1	..	10594b	64	727	10.7	- 3 47	8.7	8.8	A2	4	..	10594b
15	846	10.1	-14 24	8.8	9.2	F5	4	..	22166b	65	780	10.7	- 7 49	4.48	5.26	G5	..	R	56,77
16	817	10.1	-20 59	8.7	9.6	G5	4	..	41089b	66	1670	10.7	-37 14	9.9	11.2	Go	3	..	39655b
17	816	10.1	-21 5	9.4	10.1	Ko	2	..	41089b	67	1425	10.7	-42 32	3.83	4.83	Ko	..	R	28,197
18	2174	10.1	-23 57	9.9	9.8	Go	2	..	41089b	68	1344	10.7	-46 4	8.9	9.5	G5	3	..	41076b
19	1612	10.1	-27 21	9.5	10.1	F5	2	..	41072b	69	505	10.7	-52 9	9.8	9.9	A5	2	..	41013b
20	1710	10.1	-30 22	7.11	8.5	Ko	7	..	41072b	70	310	10.7	-61 51	9.3	9.6	F2	5	..	23802b
21	1671	10.1	-32 18	7.14	7.9	G5	6	..	41080b	71	291	10.8	+71 4	8.8	9.6	G5	2	..	38165i
22	920	10.2	+40 21	8.4	8.9	F8	3	..	38152i	72	899	10.8	+51 46	7.68	8.46	G5	4	5,3	37406i
23	614	10.2	+ 5 57	6.54	7.10	Go	7	..	37566i	73	1151	10.8	+49 26	8.6	9.7	K2	2	..	37406i
24	576	10.2	+ 3 46	8.0	8.0	Ao	6	0,7	37549i	74	1076	10.8	+48 27	8.0	8.4	F5	3	..	37406i
25	1672	10.2	-32 6	9.5	10.3	G5	1	..	41080b	75	967	10.8	+47 50	8.5	8.5	Ao	3	..	37406i
26	1662	10.2	-37 15	10.5	11.7	Ko	2	..	39655b	76	781	10.8	- 7 47	9.7	9.7	A	2	..	10595b
27	1286	10.2	-40 37	6.38	7.8	G5	8	..	39655b	77	812	10.8	-20 14	8.8	10.1	K5	2	..	41089b
28	1325	10.2	-41 38	8.8	8.2	A5	5	..	41076b	78	782	10.8	-22 14	9.1	9.9	Go	2	..	41089b
29	860	10.3	+47 1	8.9	9.4	F8	5	..	7197m	79	1490	10.8	-38 31	6.78	7.1	G5	8	..	39655b
30	725	10.3	+ 1 46	9.2	9.3	A2	1	..	46180b	80	1491	10.8	-38 34	9.2	9.3	G5	2	..	39655b
31	725	10.3	- 3 25	8.6	9.1	F8	5	..	10594b	81	1345	10.8	-46 26	8.9	10.7	K5	1	..	46199b
32	875	10.3	- 9 54	9.21	9.27	A2	2	..	10595b	82	1246	10.8	-48 47	10.3	11.1	G5	1	..	38413b
33	751	10.3	-15 25	9.7	10.1	F5	2	..	22166b	83	312	10.8	-65 39	8.8	9.2	F5	4	..	20430b
34	1664	10.3	-37 17	6.80	7.9	Ko	5	..	39655b	84	..	10.9	+73 21	..	..	Fo	2	..	6449m
35	290	10.4	+70 48	9.9	9.9	Ao	1	..	38165i	85	754	10.9	+53 17	8.0	8.8	G5	3	5,2	37406i
36	694	10.4	+61 22	7.8	7.9	A3	3	0,3	37427i	86	806	10.9	+52 44	8.4	9.5	K2	1	..	38981i
37	578	10.4	+ 3 44	9.2	10.2	Ko	2	..	46180b	87	..	10.9	+46 43	..	..	Go	1	..	7197m
38	856	10.4	- 9 45	8.76	9.94	K5	2	..	10595b	88	906	10.9	+45 22	8.6	9.0	F5	7	0,2	6673m
39	848	10.4	-14 40	8.9	9.7	G5	2	..	22166b	89	665	10.9	+23 6	8.8	9.8	Ko	2	..	37589i
40	817	10.4	-16 26	7.35	8.13	G5	3	0,2	8862b	90	652	10.9	+ 6 54	7.6	8.2	Go	5	..	37566i
41	1244	10.4	-48 31	9.5	9.6	F8	4	..	38413b	91	721	10.9	+ 0 12	7.18	7.18	Ao	7	0,8	37549i
42	353	10.4	-58 4	8.9	9.3	F8	3	..	12036b	92	667	10.9	- 0 42	9.2	9.5	Fo	1	5,1	37593i
43	298	10.4	-60 55	8.8	10.5	K2	3	..	23802b	93	815	10.9	- 8 53	7.9	8.9	Ko	4	..	10595b
44	221	10.5	+73 52	9.9	10.5	G	1	..	6449m	94	820	10.9	-16 42	6.89	6.87	B9	6	1,7	42139b
45	861	10.5	+46 14	10.2	10.3	A2	2	..	7197m	95	833	10.9	-17 9	9.1	9.7	Go	2	..	22166b
46	690	10.5	+26 7	8.1	9.3	K5	2	..	38135i	96	1799	10.9	-25 48	9.7	10.4	G5	2	..	41072b
47	666	10.5	- 0 16	7.90	8.18	A5	5	5,5	10594b	97	1619	10.9	-27 39	9.7	9.8	Go	2	..	41072b
48	775	10.5	- 7 29	9.4	9.4	Ao	3	..	10595b	98	1618	10.9	-35 26	8.9	10.0	G5	3	..	39655b
49	1399	10.5	-39 56	10.1	10.4	Go	2	..	39655b	99	1290	10.9	-40 5	9.00	9.6	Ko	2	..	41076b
50	262	10.5	-66 26	10.2	11.3	K2	1	..	20430b	100	1331	10.9	-41 4	10.1	9.0	A5	4	E	39655b

THE HENRY DRAPER CATALOGUE.

27000

4^h 10^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1248	10.9	-48 21	9.2	10.7	Ko	2	..	38413b	51	1684	11.4	-32 30	10.3	10.5	A	1	..	41080b
2	1314	10.9	-50 50	8.4	10.3	Ma	2	..	38413b	52	1295	11.4	-40 44	10.8	10.7	A ₃	1	..	39655b
3	292	11.0	+70 16	9.19	9.19	Ao	3	..	38165i	53	1336	11.4	-41 0	9.7	9.6	Go	3	E	39655b
4	935	11.0	+43 26	7.72	7.70	B ₉	4	0.7	37010i	54	1458	11.4	-45 4	8.94	9.3	F ₅	4	..	41076b
5	852	11.0	+34 42	9.4	9.4	Ao	2	..	38939i	55	1259	11.4	-49 30	10.1	10.2	F ₅	2	..	38413b
6	687	11.0	+19 43	8.4	9.5	K ₂	1	..	37589i	56	309	11.4	-64 36	9.3	10.4	K ₂	1	..	20430b
7	723	11.0	+1 0	8.69	9.47	G ₅	2	..	46180b	57	317	11.5	+68 38	9.2	9.6	F ₅	3	..	38165i
8	722	11.0	+0 21	8.4	9.2	G ₅	2	..	37593i	58	862	11.5	+46 39	8.9	9.0	A ₃	4	..	6673m
9	1249	11.0	-48 15	10.1	10.3	A ₂	2	..	38413b	59	863	11.5	+46 11	9.9	9.9	A	1	..	7197m
10	613	11.0	-55 45	9.1	10.1	Ko	1	..	41013b	60	904	11.5	+44 26	10.2	10.2	Ao	4	0.2	7197m
11	630	11.0	-57 5	8.2	9.8	Ko	1	..	12036b	61	729	11.5	+2 6	9.2	9.3	A ₂	2	..	37593i
12	245	11.0	-68 56	10.4	10.4	A	1	..	20430b	62	668	11.5	-0 49	7.8	8.4	Go	5	0.4	10594b
13	907	11.1	+46 1	10.2	10.3	A ₂	3	..	6673m	63	754	11.5	-15 11	8.1	9.1	Ko	4	..	22166b
14	664	11.1	+4 12	9.2	9.2	Ao	4	..	46180b	64	793	11.5	-18 36	8.9	9.3	F ₅	2	..	22166b
15	878	11.1	-10 13	8.5	8.5	Ao	5	0.1	10595b	65	1836	11.5	-23 29	6.61	6.5	A ₂	7	..	41089b
16	1719	11.1	-30 19	7.42	7.4	A ₂	8	..	41072b	66	1593	11.5	-34 27	8.5	10.3	Ko	3	..	39655b
17	1400	11.1	-39 13	8.8	9.6	G ₅	3	..	39655b	67	330	11.5	-62 3	9.5	10.5	Ko	2	..	23802b
18	1332	11.1	-41 8	7.5	8.2	G ₅	7	E	39655b	68	308	11.5	-63 43	10.3	10.9	G	2	..	23802b
19	1347	11.1	-46 23	6.80	7.3	Go	10	..	41076b	69	264	11.5	-66 52	8.2	9.0	G ₅	6	..	20430b
20	328	11.1	-62 15	10.1	10.5	F ₅	2	..	23802b	70	222	11.6	+73 40	9.0	9.1	A ₅	4	5.2	6449m
21	102	11.1	-81 9	8.4	9.6	K ₅	5	..	20538b	71	864	11.6	+46 57	9.9	11.0	K ₂	1	..	7197m
22	433	11.2	+64 54	5.40	5.96	Go	8	..	37556i	72	905	11.6	+44 11	9.9	10.3	F ₅	2	..	7197m
23	1154	11.2	+49 17	8.0	8.3	F ₂	5	..	37406i	73	848	11.6	-2 37	8.3	8.3	Ao	3	0.2	37593i
24	..	11.2	+46 37	..	..	A	1	..	7197m	74	755	11.6	-15 21	9.1	9.1	Ao	3	..	22166b
25	901	11.2	+44 26	7.8	7.8	B ₉	7	1.3	6673m	75	787	11.6	-22 24	6.80	7.2	A ₂	10	..	41089b
26	844	11.2	+41 54	6.12	6.07	B ₈	7	..	37010i	76	1474	11.6	-28 38	9.4	10.4	Ko	2	..	41072b
27	827	11.2	+33 47	8.5	8.5	Ao	4	..	38939i	77	1677	11.6	-37 27	6.64	6.3	Ao	8	..	39655b
28	689	11.2	+19 25	7.6	8.0	F ₅	5	..	37511i	78	1298	11.6	-40 18	8.1	8.2	A ₃	7	..	39655b
29	607	11.2	+15 58	6.84	7.62	G ₅	5	..	37511i	79	311	11.6	-64 30	8.8	8.9	A ₂	4	..	20430b
30	728	11.2	+1 50	8.8	9.1	Fo	2	..	46180b	80	293	11.7	+70 48	8.6	8.6	Ao	3	..	38165i
31	730	11.2	-3 23	8.8	9.1	Fo	3	..	10594b	81	318	11.7	+68 39	9.2	9.5	F ₂	3	..	38165i
32	1641	11.2	-29 10	8.9	9.1	Ko	4	E	41072b	82	971	11.7	+51 7	8.2	9.3	K ₂	1	..	37406i
33	1454	11.2	-45 31	9.1	9.2	F ₅	3	..	41076b	83	1155	11.7	+49 48	5.54	5.68	A ₅	..	2.6-	56.77
34	1455	11.2	-45 39	9.9	9.5	Fo	3	..	38413b	84	908	11.7	+45 52	10.2	10.2	Ao	3	..	6673m
35	312	11.2	-61 39	9.9	11.1	K ₅	3	..	23802b	85	906	11.7	+37 20	8.4	8.7	Fo	3	..	10405i
36	250	11.2	-71 36	8.8	9.8	Ko	1	..	20430b	86	616	11.7	+22 2	9.4	9.7	F	1	R	37589i
37	434	11.3	+64 39	8.7	9.1	F ₅	3	..	37556i	87	620	11.7	+6 7	9.2	9.5	F ₂	3	..	37566i
38	902	11.3	+44 55	9.9	10.5	Go	2	..	6673m	88	666	11.7	+4 19	8.6	9.1	F ₈	4	..	37593i
39	670	11.3	+2 33	8.0	8.1	A ₅	3	..	37593i	89	608	11.7	-1 1	8.8	8.9	A ₂	3	2.3	10594b
40	863	11.3	-18 53	7.17	8.17	Ko	8	..	22166b	90	609	11.7	-1 23	8.8	9.8	Ko	1	..	10594b
41	785	11.3	-22 45	9.1	9.5	Go	2	..	41089b	91	785	11.7	-6 58	8.2	9.0	G ₅	4	..	10595b
42	1257	11.3	-49 50	8.64	9.0	B ₉	7	..	38413b	92	882	11.7	-10 20	7.52	7.58	A ₂	7	0.3-	10595b
43	1057	11.3	-51 51	7.4	8.7	Ko	5	..	41013b	93	789	11.7	-21 54	9.4	10.1	G ₅	2	..	41089b
44	938	11.4	+43 29	7.43	7.49	A ₂	5	0.8	37010i	94	1723	11.7	-30 48	8.0	9.7	Ko	2	..	41072b
45	724	11.4	+20 20	4.80	4.88	A ₃	..	0.8 R	56.77	95	1652	11.7	-36 27	7.46	8.8	G ₅	6	..	39655b
46	579	11.4	+3 16	9.2	10.0	G ₅	1	..	46180b	96	1497	11.7	-38 33	6.88	8.0	Go	7	..	39655b
47	820	11.4	-8 27	9.1	10.1	Ko	2	..	10595b	97	1320	11.7	-50 40	8.4	9.9	Ma	4	..	38413b
48	2191	11.4	-24 18	9.1	9.8	G ₅	3	..	41089b	98	633	11.7	-57 10	8.8	9.8	Ko	2	5.1	20264b
49	1721	11.4	-30 37	9.2	9.4	F ₅	2	..	41072b	99	358	11.7	-58 16	7.0	7.1	Ao	7	2.3	12036b
50	1683	11.4	-32 2	8.12	9.0	Ko	3	..	41080b	100									

ANNALS OF HARVARD COLLEGE OBSERVATORY.

27100

4^h 11^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	292	11.7	-67 48	8.6	9.6	Ko	3	..	20430b	51	864	12.2	-19 51	9.33	9.8	G5	1	..	41089b
2	248	11.7	-68 28	9.4	10.4	Ko	2	..	20430b	52	826	12.2	-20 58	8.7	9.8	K2	5	..	41089b
3	175	11.8	+75 14	8.67	8.67	Ao	6	5.1	6449m	53	1467	12.2	-44 52	9.14	9.3	F8	3	..	46199b
4	808	11.8	+52 38	8.8	8.9	A2	1	..	37406i	54	1260	12.2	-48 28	9.9	10.7	G5	2	..	38413b
5	..	11.8	+46 10	..	..	A	1	R	7197m	55	508	12.2	-52 50	8.8	10.2	G5	2	..	41013b
6	..	11.8	+46 10	..	..	A	1	R	7197m	56	616	12.2	-54 58	9.07	9.8	G5	3	..	41013b
7	909	11.8	+45 12	9.9	9.9	Ao	2	..	7197m	57	938	12.3	+42 9	6.88	7.30	F5	5	..	37010i
8	..	11.8	+26 6	..	..	R3	..	..	M	58	928	12.3	+40 42	8.2	8.3	A5	3	..	38152i
9	692	11.8	+19 19	7.8	8.8	Ko	3	..	37589i	59	651	12.3	+27 51	8.8	10.0	K5	..	..	M
10	576	11.8	+16 21	8.4	9.0	Go	3	..	37511i	60	670	12.3	+22 34	7.48	7.90	F5	5	..	37589i
11	732	11.8	-3 22	9.2	9.6	F5	2	..	10594b	61	730	12.3	+1 54	8.8	9.8	Ko	1	..	46180b
12	839	11.8	-12 41	9.4	10.0	Go	2	..	11798b	62	853	12.3	-2 31	9.2	9.3	A2	4	2.3	37593i
13	848	11.8	-13 26	8.1	9.3	K5	2	..	11798b	63	826	12.3	-16 21	9.4	10.4	K	1	..	22166b
14	854	11.8	-14 11	8.6	9.6	Ko	3	..	22166b	64	1840	12.3	-23 12	10.2	9.9	Go	1	..	41089b
15	795	11.8	-18 7	7.70	8.70	Ko	7	..	22166b	65	1841	12.3	-23 47	8.1	8.9	Ko	4	..	41089b
16	792	11.8	-22 48	9.1	9.8	Ko	2	..	41089b	66	1630	12.3	-27 16	10.2	9.8	Ao	3	..	41072b
17	2195	11.8	-24 16	8.2	8.9	F2	5	..	41089b	67	1725	12.3	-29 59	9.1	11.1	Ko	2	..	41072b
18	2194	11.8	-24 46	8.2	9.3	G5	4	0.3	41072b	68	1774	12.3	-31 7	8.9	9.1	Go	3	..	41080b
19	1628	11.8	-27 46	9.2	10.2	G5	2	..	41072b	69	1689	12.3	-31 58	8.8	9.3	G5	3	..	41080b
20	1596	11.8	-34 24	9.1	9.7	Fo	3	..	41080b	70	1632	12.3	-35 30	8.1	7.9	F5	7	..	39655b
21	223	11.9	+73 30	9.2	10.0	G5	2	..	6449m	71	1301	12.3	-40 34	9.9	10.0	F5	2	..	39655b
22	1078	11.9	+48 59	8.2	8.3	A3	3	..	37406i	72	143	12.4	+79 28	8.0	8.5	F8	5	..	37558i
23	910	11.9	+45 47	9.9	10.9	Ko	2	..	7197m	73	323	12.4	+67 19	9.2	10.2	Ko	2	..	38165i
24	906	11.9	+45 5	9.17	9.67	F8	4	0.2	7197m	74	701	12.4	+61 59	8.0	8.8	G5	2	..	37556i
25	866	11.9	+36 37	7.92	7.98	A2	5	..	10405i	75	929	12.4	+40 46	8.0	9.2	K5	2	..	38152i
26	840	11.9	+35 45	8.30	8.72	F5	2	..	10405i	76	618	12.4	+21 20	5.56	5.70	A5	..	5.8	56,77
27	829	11.9	+33 37	7.8	8.3	F8	2	..	10405i	77	677	12.4	+2 8	10.6	10.7	A2	1	..	46180b
28	765	11.9	+32 9	7.58	7.72	A5	4	..	38135i	78	611	12.4	-1 46	9.22	9.78	Go	1	..	10594b
29	617	11.9	+22 6	8.2	8.6	F5	3	..	37589i	79	862	12.4	-6 43	6.09	7.09	Ko	4	5.8	10637b
30	577	11.9	+16 41	8.3	9.1	G5	2	..	37511i	80	836	12.4	-17 19	9.4	9.7	Fo	2	..	22166b
31	668	11.9	+4 47	8.0	8.3	F2	7	..	37593i	81	1632	12.4	-27 1	9.9	10.7	G	1	..	41072b
32	859	11.9	-9 42	8.5	9.5	Ko	1	..	10595b	82	1681	12.4	-37 17	9.9	11.7	G5	2	..	39655b
33	134	12.0	+80 42	7.17	7.23	A2	9	..	37558i	83	317	12.4	-65 52	8.9	9.2	F2	5	..	20430b
34	142	12.0	+79 25	7.9	8.4	F8	2	..	37558i	84	494	12.5	+63 36	8.6	9.6	Ko	1	..	37556i
35	294	12.0	+70 36	8.24	8.52	Fo	2	..	37630i	85	673	12.5	+62 25	8.4	8.8	F5	5	..	37556i
36	321	12.0	+67 30	7.8	8.6	G5	4	..	37556i	86	612	12.5	-1 7	8.8	9.2	F5	3	3.3	10594b
37	726	12.0	+0 40	9.2	9.3	A5	2	..	37593i	87	1476	12.5	-28 40	9.5	9.5	G5	3	..	41072b
38	1812	12.0	-25 2	9.30	9.8	G5	2	..	41089b	88	313	12.5	-61 25	9.9	11.1	K5	2	..	23802b
39	1811	12.0	-25 42	9.2	9.6	A2	4	..	41072b	89	82	12.5	-83 8	9.2	10.2	Ko	2	..	20538b
40	1647	12.0	-29 24	8.9	9.0	A2	4	..	41072b	90	220	12.6	+72 50	7.9	9.0	K2	3	..	38165i
41	1636	12.0	-33 14	9.2	9.7	G5	2	..	41080b	91	318	12.6	+67 3	8.7	9.0	Fo	3	..	37556i
42	647	12.0	-56 26	7.3	7.8	F5	8	..	41013b	92	973	12.6	+50 41	5.54	5.37	B3	..	1.8	56,77
43	251	12.0	-70 59	8.9	9.2	Fo	3	5.2	20430b	93	656	12.6	+6 37	9.4	9.4	Ao	2	..	37566i
44	846	12.1	+41 18	8.0	9.1	K2	1	..	38152i	94	837	12.6	-17 41	8.6	9.1	F8	3	..	22166b
45	659	12.1	+13 36	7.02	7.80	G5	5	..	37511i	95	795	12.6	-22 34	8.7	9.5	G5	3	..	41089b
46	673	12.1	+2 17	7.5	8.3	G5	5	..	37593i	96	1634	12.6	-27 1	9.4	10.7	G5	1	..	41072b
47	1688	12.1	-32 14	8.8	8.7	F8	3	..	41080b	97	1655	12.6	-36 36	10.1	10.9	F8	2	..	39655b
48	322	12.2	+67 51	9.4	10.4	Ko	1	..	38165i	98	1261	12.6	-48 27	10.3	10.2	A2	3	..	38413i
49	703	12.2	+18 0	7.5	8.3	G5	4	..	37511i	99	670	12.6	-53 15	9.0	10.4	Mb	3	..	41013b
50	555	12.2	+10 48	8.4	8.4	Ao	4	0.3	37566i	100	359	12.6	-58 0	8.6	9.7	F5	3	..	12036b

THE HENRY DRAPER CATALOGUE.

27200

4^h 12^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	314	12.6	-61 53	8.3	9.7	Ko	7	..	23802b	51	678	13.1	-0 1	8.48	9.04	Go	2	..	37593i
2	1224	12.7	+74 5	8.7	9.7	Ko	5	5,2	6449m	52	829	13.1	-16 1	9.2	9.7	F8	2	..	22166b
3	319	12.7	+68 15	9.2	10.0	G5	2	..	38165i	53	1735	13.1	-30 15	9.2	9.9	Ko	3	..	41072b
4	1789	12.7	+59 40	8.2	8.2	Ao	4	0,3	37435i	54	1349	13.1	-41 6	9.7	9.9	Ko	3	..	39655b
5	855	12.7	-2 5	9.1	9.5	F5	3	..	37593i	55	1266	13.1	-48 34	9.7	9.7	F2	4	..	38413b
6	844	12.7	-23 8	10.2	10.4	Ko	1	..	41089b	56	332	13.1	-62 43	3.36	4.14	G5	..	R	28,197
7	1652	12.7	-29 32	9.1	9.1	A2	5	..	41072b	57	1160	13.2	+50 1	8.77	8.77	A	1	..	37406i
8	1408	12.7	-39 52	8.20	7.8	Ao	6	..	41076b	58	946	13.2	+43 22	8.2	8.2	Ao	2	..	38152i
9	355	12.7	-46 12	9.1	9.5	G5	2	..	41076b	59	651	13.2	+30 39	7.8	9.0	K5	2	..	38135i
10	510	12.7	-51 59	9.1	9.9	Ao	2	..	41013b	60	671	13.2	+4 14	8.9	9.4	F8	2	..	46180b
11	509	12.7	-52 25	8.7	9.0	B9	4	..	41013b	61	839	13.2	-16 58	8.1	9.2	K2	3	..	22166b
12	300	12.7	-60 27	7.7	9.6	Fo	6	..	23802b	62	829	13.2	-21 30	8.2	9.3	Ko	5	0,4	41089b
13	251	12.8	+69 18	9.2	10.0	G5	2	..	38165i	63	1821	13.2	-25 34	9.7	9.8	Go	2	..	41072b
14	909	12.8	+37 46	7.34	7.62	Fo	6	..	10405i	64	333	13.2	-62 14	9.6	10.8	K5	2	..	23802b
15	584	12.8	+3 17	8.9	9.0	A2	2	..	37593i	65	761	13.3	+54 58	9.26	9.26	A	1	..	38981i
16	871	12.8	-5 24	8.5	9.1	Go	2	..	10595b	66	917	13.3	+45 12	9.39	9.47	A3	2	..	37406i
17	852	12.8	-13 43	8.3	8.3	Ao	5	..	22166b	67	700	13.3	+26 0	8.0	8.0	Ao	2	..	38135i
18	1817	12.8	-25 4	8.95	9.8	K5	3	..	41089b	68	575	13.3	+12 41	8.8	8.8	Ao	2	..	37511i
19	1657	12.8	-36 44	8.8	9.1	Go	5	..	39655b	69	622	13.3	+5 28	8.2	8.5	F2	5	..	37566i
20	1317	12.8	-47 37	9.0	10.4	Go	3	..	38413b	70	672	13.3	+4 42	8.4	9.5	K2	2	..	37593i
21	321	12.8	-59 20	8.4	9.6	G5	2	..	12036b	71	680	13.3	+2 13	8.0	8.8	G5	4	..	37593i
22	161	12.8	-77 18	8.8	8.9	A2	6	..	15162b	72	729	13.3	+1 3	8.84	9.40	Go	2	..	37593i
23	799	12.9	+60 33	8.8	8.8	B9	5	0,5	37556i	73	858	13.3	-2 39	8.7	8.7	Ao	3	0,3	17408b
24	904	12.9	+56 28	8.0	9.0	Ko	3	0,3	37435i	74	672	13.3	-53 34	7.1	8.9	Ko	7	..	41013b
25	972	12.9	+39 41	8.0	8.3	Fo	3	..	38152i	75	320	13.4	+68 53	8.1	8.9	G5	5	..	38165i
26	867	12.9	+36 54	8.6	8.9	F	1	..	38939i	76	976	13.4	+50 8	7.69	8.76	K2	3	..	33932i
27	705	12.9	+17 35	8.6	8.7	A2	4	..	37511i	77	1161	13.4	+50 2	8.17	8.67	F8	2	..	33932i
28	884	12.9	-10 13	9.7	9.7	Ao	2	..	10595b	78	852	13.4	+41 35	6.12	6.90	G5	6	..	37010i
29	1636	12.9	-27 51	9.4	10.4	Ko	2	..	41072b	79	973	13.4	+39 36	7.8	8.9	K2	2	..	38152i
30	1654	12.9	-29 9	7.7	8.4	A2	7	..	41072b	80	875	13.4	+38 7	8.6	8.6	Ao	2	..	38939i
31	1438	12.9	-42 52	7.7	8.1	Fo	5	..	41076b	81	697	13.4	+19 29	8.6	9.0	F5	2	3,2	37589i
32	868	13.0	+55 18	8.0	8.1	A3	6	1,4	37435i	82	707	13.4	+17 17	8.5	9.3	G5	2	..	37511i
33	810	13.0	+53 7	8.0	8.0	B9	3	..	38981i	83	673	13.4	+4 30	8.6	8.9	F2	3	..	46180b
34	873	13.0	+39 4	8.0	9.2	K5	1	..	38939i	84	795	13.4	-4 46	9.35	9.41	A2	2	..	10595b
35	573	13.0	+12 19	8.4	9.2	G5	1	..	37511i	85	819	13.4	-20 7	9.1	9.8	Ao	2	..	41089b
36	558	13.0	+9 15	6.49	6.55	A2	9	..	37566i	86	1642	13.4	-27 55	9.4	10.7	G5	1	..	41072b
37	870	13.0	-19 46	8.08	8.3	Fo	6	0,8	22166b	87	1742	13.4	-30 42	8.9	9.9	K5	3	..	41072b
38	828	13.0	-21 16	9.4	9.9	Go	3	..	41089b	88	1693	13.4	-32 54	9.1	9.1	Ao	4	..	41080b
39	1734	13.0	-30 20	8.9	9.9	K	3	..	41072b	89	1685	13.4	-37 0	9.5	10.0	Go	3	..	39655b
40	1659	13.0	-36 54	9.1	10.3	Go	3	..	39655b	90	1066	13.4	-51 44	4.36	4.78	F5	..	R	28,197
41	1410	13.0	-39 8	7.02	7.1	Ao	8	..	39655b	91	759	13.5	+53 27	8.0	8.1	A5	3	..	37406i
42	671	13.0	-53 51	7.7	9.0	G5	6	..	41013b	92	1162	13.5	+50 1	7.34	8.41	K2	3	..	37406i
43	618	13.0	-55 7	9.2	10.4	K2	1	..	41013b	93	939	13.5	+43 0	7.42	8.49	K2	2	..	37010i
44	315	13.0	-61 7	8.8	10.8	K5	3	..	23802b	94	853	13.5	+41 12	8.0	8.0	Ao	4	..	38152i
45	800	13.1	+60 30	5.67	6.67	Ko	7	2,7	37435i	95	733	13.5	+20 55	5.39	5.34	B8	..	0,8-	56,77
46	869	13.1	+55 16	8.01	8.01	Ao	4	2,2	37435i	96	661	13.5	+13 28	7.72	8.06	F2	3	..	37511i
47	975	13.1	+50 53	8.6	8.6	Ao	3	0,3	38981i	97	681	13.5	+2 55	8.4	9.2	G5	2	..	37593i
48	668	13.1	+23 48	7.8	8.6	G5	3	..	37589i	98	841	13.5	-17 18	8.3	8.3	Ao	6	2,3	22166b
49	731	13.1	+21 4	9.0	9.4	F5	3	..	37589i	99	800	13.5	-22 47	9.2	9.5	A2	4	..	41089b
50	694	13.1	+19 40	8.6	9.4	G5	2	..	37589i	100	2218	13.5	-24 2	9.1	10.1	Ko	1	..	41089b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

27300

4^h 13^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1309	13.5	-40 19	9.5	10.4	G5	2	..	39655b	51	615	13.9	-1 9	8.2	9.0	G5	6	0,3	10594b
2	1479	13.5	-44 39	8.7	9.3	Go	4	..	46199b	52	875	13.9	-19 29	8.5	9.9	K5	2	E	41089b
3	1471	13.5	-45 38	8.6	8.9	F8	3	..	41076b	53	2222	13.9	-24 18	8.1	9.0	F8	7	..	41089b
4	334	13.5	-62 26	5.40	6.6	Ko	..	..	56,120	54	1483	13.9	-28 42	9.7	10.7	Ko	1	..	41072b
5	320	13.5	-65 13	7.8	8.2	F5	7	..	20430b	55	1782	13.9	-31 20	9.2	9.4	F8	2	..	41080b
6	252	13.5	-69 22	8.8	9.6	G5	5	..	20430b	56	301	13.9	-60 4	9.0	10.2	Fo	2	..	23802b
7	177	13.6	+75 56	9.5	10.5	Ko	2	..	6449m	57	297	13.9	-67 21	9.6	9.6	Ao	5	..	20430b
8	872	13.6	+36 58	7.7	9.1	Ma	1	..	38939i	58	104	13.9	-80 59	7.95	8.45	F8	9	..	20538b
9	623	13.6	+21 32	5.32	5.32	Aop	..	R	56,77	59	226	14.0	+73 52	10.2	10.3	A2	1	..	6449m
10	735	13.6	+20 49	9.4	9.8	F5	1	..	37589i	60	907	14.0	+57 5	8.4	8.8	F5	3	5,3	37426i
11	608	13.6	+19 42	8.0	8.0	Ao	5	..	37589i	61	592	14.0	+11 43	7.64	8.06	F5	5	3,4	37566i
12	876	13.6	-5 19	9.4	9.8	F5	2	..	10595b	62	831	14.0	-20 57	6.36	8.1	Mb	8	5,10	23810b
13	830	13.6	-16 38	8.7	9.9	K5	1	..	22166b	63	1664	14.0	-36 12	9.7	10.9	G5	2	..	39655b
14	801	13.6	-22 37	9.2	9.8	F2	2	..	41089b	64	1418	14.0	-39 31	9.9	10.8	G5	2	..	39655b
15	1639	13.6	-35 8	9.4	10.9	Ko	3	..	39655b	65	1271	14.0	-48 45	8.1	8.0	Fo	7	..	38413b
16	1638	13.6	-35 21	9.9	11.7	G5	1	..	39655b	66	1072	14.0	-51 50	8.4	9.3	Ko	4	..	41013b
17	1480	13.6	-44 32	8.7	9.5	F8	3	3,3	46199b	67	316	14.0	-61 27	9.1	10.5	K5	3	..	23802b
18	1323	13.6	-47 20	8.4	9.5	Ko	5	2,4	38413b	68	179	14.1	+76 5	9.9	10.9	Ko	1	..	6449m
19	620	13.6	-55 53	8.9	9.9	Ko	2	..	41013b	69	849	14.1	+35 34	8.0	9.1	K2	3	..	38939i
20	651	13.6	-56 46	8.4	9.3	F5	3	..	12036b	70	675	14.1	+23 21	7.46	8.24	G5	4	..	37589i
21	314	13.6	-64 6	9.8	10.4	Go	3	..	23802b	71	612	14.1	+15 23	3.86	4.86	Ko	..	R	56,77
22	905	13.7	+56 16	5.90	5.96	A2	8	1,8	37426i	72	662	14.1	+14 3	7.8	8.6	G5	2	..	37511i
23	653	13.7	+30 55	8.8	9.6	G5	2	..	38135i	73	855	14.1	-11 58	8.5	9.5	Ko	3	..	11798b
24	733	13.7	+1 33	8.2	9.0	G5	3	..	37593i	74	857	14.1	-13 31	9.1	10.1	K	1	..	11798b
25	866	13.7	-14 53	6.90	7.90	Ko	4	0,8	8862b	75	1854	14.1	-23 0	9.1	9.3	G5	3	..	41089b
26	821	13.7	-20 50	9.7	10.1	A3	2	..	41089b	76	1614	14.1	-34 3	3.59	3.57	B9	..	R	28,197
27	1644	13.7	-27 28	10.2	10.7	G	1	..	41072b	77	1613	14.1	-34 26	7.28	7.7	Fo	5	..	41080b
28	1601	13.7	-37 6	8.8	9.7	G5	3	..	39655b	78	325	14.2	+67 41	8.5	8.8	F2	4	..	37556i
29	296	13.7	-66 59	8.7	9.2	F8	4	..	20430b	79	324	14.2	+67 29	8.6	9.4	G5	3	..	37556i
30	178	13.8	+75 17	10.2	11.3	K2	1	..	6449m	80	400	14.2	+65 46	9.5	10.3	G5	2	E	38165i
31	249	13.8	+71 56	9.7	9.8	A3	2	..	38165i	81	876	14.2	+38 20	7.64	7.98	F2	4	..	10405i
32	921	13.8	+45 13	7.62	7.62	Ao	5	0,5	37406i	82	655	14.2	+27 7	5.06	6.06	Ko	10	R	38135i
33	940	13.8	+42 46	8.4	8.5	A2	3	..	38152i	83	579	14.2	+16 18	6.86	7.42	Go	5	..	37511i
34	654	13.8	+30 41	8.4	8.4	Ao	3	..	38135i	84	680	14.2	+14 38	8.8	9.1	F	1	..	37511i
35	672	13.8	+23 31	7.46	7.46	Ao	6	..	37589i	85	577	14.2	+12 52	7.8	8.8	Ko	3	..	37511i
36	666	13.8	+9 3	8.3	9.1	G5	5	..	37566i	86	562	14.2	+9 53	6.62	7.62	Ko	7	..	37566i
37	667	13.8	+8 17	9.2	9.8	G	2	..	37566i	87	627	14.2	+5 14	9.4	9.5	A2	2	..	46180b
38	683	13.8	+2 27	9.2	9.6	F5	2	..	46180b	88	792	14.2	-7 40	8.3	8.6	Fo	4	..	10595b
39	734	13.8	+1 31	8.2	8.3	A2	7	..	37593i	89	832	14.2	-21 0	9.1	9.3	Go	5	..	41089b
40	740	13.8	-2 56	9.2	9.3	A2	2	0,2	17408b	90	1830	14.2	-25 45	8.7	9.8	Go	3	..	41072b
41	1641	13.8	-35 31	9.7	10.6	Ko	2	..	39655b	91	1697	14.2	-32 56	9.7	10.4	F5	1	..	41080b
42	1416	13.8	-39 6	8.8	8.4	Ao	5	..	39655b	92	1666	14.2	-36 20	8.8	10.0	Ko	3	..	39655b
43	1273	13.8	-49 1	9.3	9.9	G5	3	..	38413b	93	1317	14.2	-40 19	9.2	10.4	Ko	2	..	39655b
44	1330	13.8	-50 12	9.7	10.5	G5	2	..	38413b	94	437	14.3	+65 1	8.10	8.88	G5	3	..	37556i
45	644	13.8	-54 15	9.0	9.8	F2	3	..	41013b	95	1165	14.3	+49 48	7.37	7.93	Go	5	..	37406i
46	287	13.8	-70 40	7.03	7.9	Fo	10	..	20430b	96	872	14.3	+46 16	4.89	4.72	B3	..	0,R	56,77
47	1085	13.9	+48 26	9.5	10.6	K2	..	..	M	97	663	14.3	+13 48	5.59	5.87	Fo	7	R	37511i
48	860	13.9	+34 20	5.10	5.88	G5	6	..	10405i	98	863	14.3	-1 58	9.4	9.8	F5	2	..	10594b
49	757	13.9	+31 44	6.35	7.53	K5	5	..	38135i	99	802	14.3	-17 57	7.70	8.88	K5	6	..	22166b
50	679	13.9	+14 27	7.8	7.9	A2	2	..	37511i	100	824	14.3	-20 34	9.2	10.1	K2	2	..	41089b

THE HENRY DRAPER CATALOGUE.

27400

4^h 14^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1645	14.3	-35 26	10.3	11.4	A	2	..	39655b	51	892	14.8	-10 49	8.6	9.0	F5	3	..	11798b
2	793	14.4	+59 23	6.15	6.15	Ao	6	0,9-	37426i	52	2232	14.8	-24 23	8.0	9.3	Ko	4	..	41089b
3	876	14.4	+36 21	7.60	7.66	A2	5	..	10405i	53	1667	14.8	-36 45	9.4	10.6	G5	2	..	39655b
4	642	14.4	+28 40	8.2	8.2	Ao	5	..	38135i	54	1520	14.8	-38 21	7.90	9.6	G5	3	..	39655b
5	703	14.4	+25 36	7.81	7.79	B9	4	..	38135i	55	1519	14.8	-38 25	9.4	9.0	G	4	..	39655b
6	623	14.4	+19 0	7.7	8.2	F8	4	..	37511i	56	913	14.9	+51 42	7.78	8.56	G5	3	0,3	37406i
7	629	14.4	+ 8 3	9.2	9.7	F8	2	..	37566i	57	922	14.9	+45 18	9.2	9.2	B9	2	..	38152i
8	685	14.4	+ 2 45	7.8	7.9	A3	7	..	37593i	58	863	14.9	+34 20	7.67	8.85	K5	3	..	38939i
9	735	14.4	+ 1 58	8.6	8.6	B9	3	..	37593i	59	682	14.9	+14 52	5.27	5.55	Fo	..	0,9	56,77
10	870	14.4	- 6 45	8.9	9.9	Ko	2	..	10595b	60	631	14.9	+ 7 37	7.6	7.6	B8	5	..	37566i
11	1856	14.4	-23 13	6.08	6.3	A3	10	..	41089b	61	1430	14.9	-39 8	9.4	9.6	Fo	3	..	39655b
12	2230	14.4	-24 42	8.7	9.8	Ko	2	..	41089b	62	676	14.9	-53 46	8.6	9.5	F8	5	..	41013b
13	1647	14.4	-35 45	9.2	10.6	G5	3	..	39655b	63	317	14.9	-61 11	6.32	6.1	Ao	10	..	12036b
14	364	14.4	-58 32	9.1	10.3	K2	1	..	23802b	64	795	15.0	+59 30	7.8	7.9	A5	3	..	37435i
15	251	14.4	-73 4	7.0	7.5	F8	6	3,7	46167b	65	737	15.0	+ 1 45	8.8	8.9	A2	3	..	46180b
16	795	14.5	+57 10	9.5	9.5	Ao	2	..	38981i	66	799	15.0	- 4 40	7.85	8.63	G5	5	..	10595b
17	813	14.5	+53 6	8.6	8.7	A2	1	..	38981i	67	765	15.0	-15 24	8.9	9.0	A5	4	..	22166b
18	980	14.5	+50 47	8.9	8.9	Ao	2	0,2	37406i	68	1866	15.0	-23 39	9.1	9.2	F8	6	..	41089b
19	657	14.5	+31 1	8.2	8.2	B9	4	..	38135i	69	1654	15.0	-27 14	9.4	9.8	Go	2	..	41072b
20	670	14.5	+ 9 3	8.9	9.7	G5	2	..	37566i	70	1622	15.0	-34 22	8.1	8.3	Go	4	..	41080b
21	616	14.5	- 1 30	9.2	10.2	Ko	1	..	10594b	71	1481	15.0	-45 54	7.5	7.8	Go	5	..	41076b
22	745	14.5	- 3 21	9.1	9.4	Fo	2	..	10594b	72	318	15.0	-61 19	10.2	10.5	Fo	2	..	23802b
23	858	14.5	-13 34	9.1	10.1	K	1	..	11798b	73	254	15.0	-68 59	9.3	9.6	F2	4	..	20430b
24	803	14.5	-18 5	7.50	7.56	A2	6	0,3	8862b	74	401	15.1	+65 32	9.5	9.5	A	1	E	38165i
25	1786	14.5	-31 6	8.9	9.6	F5	3	5,4-	14649b	75	866	15.1	- 1 54	9.7	10.0	Fo	3	..	10594b
26	1515	14.5	-38 41	9.4	9.6	Ko	3	..	39655b	76	1279	15.1	-48 38	8.5	8.4	B8	6	..	38413b
27	912	14.6	+38 1	7.93	8.21	Fo	4	..	10405b	77	513	15.1	-52 43	8.7	9.9	Ko	2	..	41013b
28	840	14.6	+33 8	7.8	8.8	Ko	3	..	38939i	78	256	15.1	-71 0	8.7	9.8	K2	3	0,2	20430b
29	624	14.6	+18 29	5.96	6.24	Fo	6	..	37511i	79	134	15.1	-79 16	8.2	8.3	A2	4	..	20538b
30	663	14.6	+ 6 17	8.9	9.0	A5	1	..	46180b	80	..	15.1	-86 25	..	..	K5	1	..	15145b
31	1485	14.6	-28 24	9.4	9.8	F8	2	..	41072b	81	764	15.2	+31 23	8.0	9.2	K5	1	..	38135i
32	1365	14.6	-41 34	9.1	10.7	K2	2	..	41076b	82	656	15.2	+27 7	7.70	8.77	K2	1	..	38135i
33	297	14.7	+71 4	8.7	9.2	F8	3	..	38165i	83	665	15.2	+13 38	6.14	6.48	F2	6	..	37511i
34	1166	14.7	+49 45	9.0	9.1	A3	2	..	37406i	84	560	15.2	+11 0	8.6	8.6	Ao	4	2,3	37566i
35	924	14.7	+45 1	9.07	9.07	Ao	2	..	38152i	85	801	15.2	- 3 58	7.96	8.52	Go	4	..	10595b
36	829	14.7	- 8 21	6.94	6.94	Ao	5	1,8	10637b	86	800	15.2	- 4 44	9.05	9.61	Go	2	..	10595b
37	832	14.7	-16 36	8.7	9.1	F5	5	..	22166b	87	858	15.2	-12 38	6.92	7.70	G5	6	..	12378b
38	1650	14.7	-26 59	8.2	9.2	F8	4	..	41072b	88	1656	15.2	-27 31	8.0	9.8	K5	3	..	41072b
39	1518	14.7	-38 9	10.5	10.8	G	2	..	39655b	89	1794	15.2	-31 34	7.7	8.7	G5	4	..	41080b
40	1427	14.7	-39 49	9.00	9.2	F5	4	..	39655b	90	1626	15.2	-34 8	6.34	5.9	A2	8	..	41080b
41	1278	14.7	-48 15	10.1	10.7	G5	2	..	38413b	91	1283	15.2	-49 55	9.1	9.9	Go	4	..	38413b
42	324	14.7	-59 32	4.42	5.49	K2	..	R	28,197	92	267	15.2	-66 28	8.5	9.0	F8	5	..	20430b
43	301	14.7	-67 10	9.9	11.3	Ma	..	..	M	93	707	15.3	+61 48	6.94	7.22	Fo	8	..	37556i
44	253	14.7	-69 47	9.22	9.5	F5	5	..	20430b	94	737	15.3	+58 16	8.8	8.8	Ao	2	0,2	37435i
45	162	14.8	+76 25	9.4	10.4	Ko	4	..	6449m	95	980	15.3	+39 42	7.32	7.82	F8	5	..	10405i
46	322	14.8	+68 18	9.4	9.4	Ao	2	..	38165i	96	671	15.3	+ 8 9	8.4	9.2	G5	2	..	37566i
47	912	14.8	+51 22	8.0	8.0	Ao	2	..	38981i	97	631	15.3	+ 5 54	5.90	6.68	G5	8	..	37566i
48	858	14.8	+41 11	8.0	8.0	B9	5	..	38152i	98	867	15.3	- 2 52	7.30	8.65	Mb	4	5,3	37593i
49	682	14.8	+ 0 1	9.38	9.38	Ao	2	..	37593i	99	872	15.3	-14 49	7.86	8.86	Ko	5	..	22166b
50	864	14.8	- 2 42	8.9	9.2	F2	3	3,2	10594b	100	806	15.3	-18 45	7.7	8.0	F2	7	..	22166b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

27500

4^h 15^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1522	15.3	-38 7	9.7	9.5	F8	4	..	39655b	51	1700	15.8	-37 19	10.1	11.2	F5	2	..	39655b
2	1284	15.3	-49 42	8.7	9.6	Fo	6	..	38413b	52	1287	15.8	-48 50	8.4	9.3	Ko	5	..	38413b
3	255	15.3	-69 47	10.4	10.4	A	1	..	20430b	53	678	15.8	-53 8	7.74	7.9	F5	7	..	41013b
4	981	15.4	+47 26	8.4	9.6	K5	2	..	37406i	54	626	15.8	-55 33	8.7	9.8	F5	3	..	41013b
5	672	15.4	+ 8 59	6.45	6.53	A3	..	1,8	56,77	55	656	15.8	-56 25	8.2	9.5	Ko	4	..	41013b
6	895	15.4	-10 44	8.7	9.0	F2	3	..	11798b	56	639	15.8	-57 33	8.0	9.3	K5	3	..	12036b
7	853	15.4	-17 10	9.4	9.4	Ao	3	..	22166b	57	322	15.8	-65 23	9.3	9.6	F2	2	..	20430b
8	854	15.4	-17 42	7.92	8.99	K2	5	..	22166b	58	403	15.9	+65 48	9.5	10.1	Go	2	E	38165i
9	1629	15.4	-26 12	7.66	8.6	Fo	7	..	41072b	59	1090	15.9	+48 21	8.4	8.5	A2	2	..	37406i
10	1671	15.4	-33 26	9.5	9.7	Go	2	..	41080b	60	704	15.9	+19 13	8.24	8.80	Go	2	..	37589i
11	1376	15.4	-43 25	9.1	9.8	Fo	3	..	41076b	61	687	15.9	+14 11	6.71	6.99	Fo	..	2,6	56,77
12	1497	15.4	-44 18	9.5	9.5	A2	3	..	38413b	62	634	15.9	+ 6 1	8.6	9.4	G5	1	..	46180b
13	298	15.5	+70 43	9.5	9.5	Ao	2	..	38165i	63	798	15.9	- 7 50	5.72	5.67	B8	..	0,8	56,77
14	700	15.5	+29 58	8.76	9.76	Ko	1	..	38135i	64	873	15.9	- 9 23	8.7	9.7	Ko	2	..	10595b
15	589	15.5	+ 4 2	9.2	9.2	Ao	1	..	46180b	65	864	15.9	-13 11	8.5	9.7	K5	2	..	12378b
16	619	15.5	- 1 32	6.73	6.81	A3	6	0,8	17408b	66	368	15.9	-58 24	9.4	9.9	F8	1	..	12036b
17	1841	15.5	-25 7	9.9	9.6	F5	4	3,3	41072b	67	269	15.9	-66 9	8.6	8.6	Ao	8	..	20430b
18	1842	15.5	-25 16	6.88	8.6	K2	6	2,6	41072b	68	257	15.9	-71 22	9.1	9.5	F5	3	..	17047b
19	1495	15.5	-28 46	10.4	9.8	Go	2	..	41072b	69	227	16.0	+73 38	9.7	10.7	Ko	1	..	6449m
20	1795	15.5	-31 49	8.9	9.4	F5	2	..	41080b	70	659	16.0	+30 12	9.11	9.89	G5	1	..	38135i
21	366	15.5	-58 3	9.1	9.7	F8	2	..	12036b	71	678	16.0	+ 4 14	8.9	9.7	G5	1	..	46180b
22	320	15.5	-61 31	9.8	10.8	K	1	R	23802b	72	735	16.0	+ 0 37	8.4	8.9	F8	4	..	37593i
23	951	15.6	+43 13	7.72	8.14	F5	3	..	37010i	73	874	16.0	- 2 11	9.4	9.5	A5	2	..	46180b
24	740	15.6	+20 49	6.88	7.38	F8	6	2,5	37589i	74	806	16.0	- 3 57	7.62	8.40	G5	5	..	10595b
25	709	15.6	+18 2	7.8	7.9	A2	3	..	37511i	75	800	16.0	- 7 16	9.4	10.0	Go	2	..	10595b
26	677	15.6	+ 4 14	9.2	9.3	A2	2	..	46180b	76	1773	16.0	-30 39	8.9	9.9	Go	2	..	41080b
27	590	15.6	+ 3 40	8.8	9.2	F5	4	3,2	15135b	77	1459	16.0	-42 11	8.7	9.5	Go	3	..	41076b
28	838	15.6	-16 40	6.65	6.63	B9	5	0,7	42139b	78	646	16.0	-54 18	9.5	10.1	Go	2	..	41013b
29	1872	15.6	-23 2	8.9	10.1	Ko	4	..	41089b	79	667	16.1	+13 21	7.34	7.48	A5	5	..	37511i
30	1672	15.6	-29 1	8.1	8.7	Go	5	..	41072b	80	741	16.1	+ 1 35	9.9	10.5	G	2	..	15135b
31	321	15.6	-61 7	9.2	10.8	K2	2	..	23802b	81	883	16.1	- 5 47	8.7	9.7	Ko	1	..	10595b
32	701	15.7	+29 25	7.6	7.7	A2	3	..	38135i	82	811	16.1	-17 58	8.2	9.3	K2	3	..	22166b
33	741	15.7	+20 57	7.05	7.55	F8	5	2,4	37589i	83	843	16.1	-21 27	8.9	10.1	G5	2	..	23810b
34	629	15.7	+18 11	6.74	7.16	F5	4	..	37511i	84	842	16.1	-21 34	8.00	8.6	G5	6	..	23810b
35	563	15.7	+10 18	8.27	8.33	A2	4	..	37566i	85	1717	16.1	-32 8	9.5	10.2	Go	1	..	41080b
36	875	15.7	- 6 29	6.33	7.11	G5	9	..	10595b	86	1659	16.1	-35 16	10.1	10.9	G	3	..	39655b
37	839	15.7	-16 21	8.7	9.0	F2	4	..	22166b	87	1702	16.1	-37 40	10.3	11.2	G	2	..	39655b
38	R	15.7	-22 56	10.2	10.1	Ko	2	..	41089b	88	1503	16.1	-44 30	5.12	7.0	Ko	..	..	56,120
39	1699	15.7	-37 48	9.1	10.9	G5	3	..	39655b	89	1342	16.1	-50 4	9.09	9.3	G5	5	..	38413b
40	1435	15.7	-39 8	9.5	10.1	F8	3	..	39655b	90	640	16.1	-57 14	9.0	9.9	K5	2	..	20264b
41	1457	15.7	-41 59	8.7	10.7	Ko	2	..	41076b	91	256	16.1	-73 53	9.0	10.0	Ko	3	..	15162b
42	1377	15.7	-43 51	8.6	8.9	A3	4	..	41076b	92	325	16.2	+66 44	8.1	8.1	B9	4	..	37556i
43	1370	15.7	-46 53	9.5	10.7	A2	4	..	38413b	93	404	16.2	+65 35	9.9	9.9	A	2	E	38165i
44	322	15.7	-61 13	10.3	10.8	F8	2	..	23802b	94	874	16.2	+55 46	9.2	10.3	K2	1	..	38981i
45	317	15.7	-64 33	7.6	7.9	Fo	8	..	20430b	95	914	16.2	+37 44	7.8	8.9	K2	2	..	38939i
46	250	15.8	+71 32	7.52	7.47	B8	6	..	37630i	96	778	16.2	+32 14	7.46	8.64	K5	3	..	38135i
47	323	15.8	+66 47	9.2	9.8	Go	3	..	38165i	97	667	16.2	+ 6 44	8.4	8.4	Ao	5	..	37566i
48	880	15.8	+36 41	8.04	8.02	B9	5	..	10405i	98	856	16.2	-17 4	7.32	8.67	Ma	6	..	22166b
49	734	15.8	+ 0 57	7.87	8.94	K2	3	..	37593i	99	857	16.2	-17 42	9.2	9.7	F8	2	..	22166b
50	685	15.8	- 0 9	7.8	8.2	F5	6	..	37593i	100	2252	16.2	-24 53	9.05	10.1	Ko	2	..	41089b

THE HENRY DRAPER CATALOGUE.

27600

4^h 16^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1505	16.2	-44 30	9.5	9.0	Go	3	..	41076b	51	878	16.6	-6 18	7.29	8.29	Ko	5	..	10595b
2	1487	16.2	-45 1	9.5	10.4	Go	1	..	46199b	52	887	16.6	-19 29	8.6	9.9	Ko	2	..	23810b
3	1338	16.2	-47 48	7.0	7.9	Ko	6	5,8	41076b	53	886	16.6	-19 52	9.28	10.4	K2	2	..	23810b
4	679	16.2	-53 6	6.00	6.9	F5	..	0,10	56,120	54	833	16.6	-20 3	9.58	10.1	Go	3	..	23810b
5	370	16.2	-58 48	9.0	10.3	K2	2	..	23802b	55	1465	16.6	-42 55	9.1	9.9	G5	2	..	41076b
6	314	16.2	-63 20	8.2	9.0	G5	4	..	20430b	56	685	16.6	-53 11	8.3	8.9	F2	5	..	41013b
7	323	16.2	-65 52	9.0	9.6	Go	2	..	20430b	57	316	16.6	-63 30	6.06	6.04	B9	..	..	56,120
8	293	16.2	-72 41	8.9	10.0	K2	2	..	17047b	58	858	16.7	+35 49	8.15	8.13	B9	4	..	38939i
9	764	16.3	+53 17	7.01	7.29	Fo	6	0,5	37406i	59	648	16.7	+28 11	8.4	8.5	A3	4	..	38135i
10	636	16.3	+5 9	9.01	9.29	Fo	2	..	46180b	60	879	16.7	-6 31	6.57	6.57	Ao	4	0,8	10637b
11	687	16.3	-0 19	6.08	7.15	K2	8	..	37593i	61	371	16.7	-58 39	8.3	9.7	K2	4	..	12036b
12	874	16.3	-9 5	8.1	8.4	F2	4	..	10595b	62	325	16.7	-65 19	9.8	10.4	Go	2	..	20430b
13	858	16.3	-11 44	8.1	9.1	Ko	3	..	12378b	63	915	16.8	+56 39	9.2	10.0	G5	2	..	38981i
14	862	16.3	-12 9	8.9	9.2	Fo	3	..	12378b	64	679	16.8	+4 7	9.4	9.5	A2	3	0,2	15135b
15	863	16.3	-12 46	9.2	9.2	Ao	3	..	12378b	65	839	16.8	-8 20	7.9	7.9	Ao	7	0,2	10595b
16	831	16.3	-20 52	5.31	5.31	Ao	..	0,7	56,77	66	845	16.8	-21 29	7.66	8.6	G5	8	..	23810b
17	1666	16.3	-27 10	9.5	10.1	F5	1	..	17401b	67	1638	16.8	-26 43	9.1	9.5	F2	3	..	41072b
18	1676	16.3	-36 53	8.5	10.0	Ko	5	..	39655b	68	1530	16.8	-38 39	10.3	9.6	F8	3	..	39655b
19	681	16.3	-53 42	9.1	10.4	G5	2	..	41013b	69	629	16.8	-55 12	9.3	9.9	Go	2	..	41013b
20	324	16.3	-61 38	9.9	10.2	F2	3	..	23802b	70	320	16.8	-64 9	8.3	9.3	Ko	5	..	20430b
21	270	16.3	-66 55	8.0	9.0	Ko	7	..	20430b	71	..	16.9	+74 50	..	..	Go	2	..	6449m
22	138	16.4	+80 34	8.8	9.6	G5	2	..	37558i	72	877	16.9	+55 52	8.8	9.3	F8	2	..	38981i
23	201	16.4	+75 7	9.4	9.4	Ao	4	..	6449m	73	986	16.9	+50 37	6.88	7.22	F2	6	..	37406i
24	228	16.4	+73 45	9.7	10.7	Ko	1	..	6449m	74	881	16.9	-6 9	9.4	9.5	A3	2	..	10595b
25	252	16.4	+71 45	8.8	9.1	Fo	2	..	38165i	75	883	16.9	-6 44	9.2	10.0	G5	2	..	10595b
26	327	16.4	+67 49	8.1	8.1	B9	5	..	37556i	76	881	16.9	-14 31	8.01	9.19	K5	2	..	12378b
27	683	16.4	+22 26	9.0	10.0	Ko	1	..	37589i	77	888	16.9	-19 47	9.63	10.1	G5	2	..	23810b
28	668	16.4	+13 50	5.76	5.84	A3	8	R	37511i	78	834	16.9	-20 25	8.5	9.6	Ko	4	..	23810b
29	885	16.4	-19 34	7.29	8.3	Go	6	..	23810b	79	2266	16.9	-24 46	10.2	10.1	Go	3	..	41089b
30	1660	16.4	-35 29	10.1	11.2	G	2	..	39655b	80	1665	16.9	-35 19	9.2	10.0	F5	4	..	39655b
31	1464	16.4	-42 11	7.7	8.9	Go	5	..	41076b	81	1344	16.9	-50 51	9.2	9.9	F5	2	0,2	44376b
32	683	16.4	-53 47	8.5	9.5	Ko	4	..	41013b	82	203	17.0	+74 46	9.5	9.5	Ao	3	..	6449m
33	256	16.4	-69 2	9.0	10.1	K2	3	..	20430b	83	860	17.0	+35 40	7.28	8.06	G5	4	..	10405i
34	229	16.5	+73 27	8.9	10.0	K2	3	2,1	6449m	84	584	17.0	+17 7	8.8	9.4	Go	2	..	37511i
35	500	16.5	+63 27	8.6	9.2	Go	3	..	37556i	85	585	17.0	+16 34	7.8	8.6	G5	2	..	37511i
36	919	16.5	+51 42	6.83	6.89	A2	6	0,5	37406i	86	689	17.0	+14 41	8.4	9.2	G5	1	..	37511i
37	857	16.5	+35 15	8.52	9.52	Ko	2	..	38939i	87	669	17.0	+6 18	8.8	8.9	A3	2	..	46180b
38	707	16.5	+25 23	5.38	5.36	B9	..	R	56,77	88	1531	17.0	-38 34	9.7	10.1	Go	3	..	39655b
39	744	16.5	+20 35	6.11	7.29	K5	5	0,4 R	37589i	89	336	17.0	-62 14	9.0	10.2	K5	3	..	23802b
40	592	16.5	+3 43	8.0	8.0	Ao	6	..	37593i	90	271	17.0	-65 57	8.3	8.7	F5	4	..	20430b
41	692	16.5	+2 10	6.92	7.34	F5	8	..	37593i	91	690	17.1	+14 51	7.09	7.65	Go	..	0,5	56,77
42	1849	16.5	-24 58	8.67	9.8	Ko	3	..	41089b	92	1088	17.1	-51 12	8.5	8.7	Fo	5	..	38413b
43	1684	16.5	-33 15	9.5	9.7	Go	2	..	41080b	93	290	17.1	-69 58	7.42	8.6	G5	9	..	20430b
44	1445	16.5	-39 2	9.1	10.9	Ko	2	..	39655b	94	230	17.2	+74 4	9.7	10.5	G5	3	..	6449m
45	1381	16.5	-43 43	7.8	9.0	Ko	4	..	41076b	95	328	17.2	+67 49	9.2	9.3	A2	3	..	38165i
46	649	16.5	-54 22	7.20	7.9	Ao	10	..	41013b	96	916	17.2	+56 9	8.0	8.3	Fo	5	5,4	37435i
47	202	16.6	+75 3	9.9	9.9	Ao	2	..	6449m	97	712	17.2	+17 18	3.93	4.93	Ko	..	R	2326c
48	738	16.6	+58 21	8.1	8.2	A2	4	0,3	37435i	98	695	17.2	+2 51	8.3	9.3	Ko	3	..	46180b
49	946	16.6	+42 12	5.98	5.96	B9	7	..	37010i	99	889	17.2	-4 54	7.51	7.65	A5	7	0,4	10595b
50										100	885	17.2	-14 7	7.9	7.9	Ao	6	0,3	12378b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

27700

4^h 17^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	848	17.2	-21 9	8.5	9.8	G5	3	..	2381ob	51	884	17.7	-2 9	8.7	9.5	G5	2	..	37594i
2	1691	17.2	-33 6	8.1	9.0	G5	3	..	4108ob	52	883	17.7	-2 28	8.5	8.6	A2	4	0,3	37593i
3	1666	17.2	-34 58	7.95	8.5	A5	5	..	4108ob	53	803	17.7	-7 46	9.2	9.3	A5	2	..	10595b
4	325	17.3	+68 9	9.5	10.3	G5	2	..	38165i	54	905	17.7	-10 16	9.1	10.2	K5	1	..	12378b
5	799	17.3	+60 2	8.26	8.54	Fo	2	..	37435i	55	862	17.7	-11 18	9.7	10.3	G	1	..	12378b
6	952	17.3	+42 26	8.6	8.6	Ao	3	..	38152i	56	1497	17.7	-45 30	9.3	9.8	A2	4	..	41076b
7	595	17.3	+3 11	8.5	8.5	B9	3	..	37593i	57	162	17.8	+77 25	7.8	8.6	G5	4	..	37558i
8	902	17.3	-10 11	8.1	9.3	K5	2	..	12378b	58	254	17.8	+71 27	8.0	8.3	Fo	2	..	3763oi
9	867	17.3	-11 59	9.7	10.3	Go	2	..	12378b	59	874	17.8	+35 1	7.77	9.12	Ma	3	..	38939i
10	1642	17.3	-25 57	5.88	6.8	Fo	..	..	56,120	60	686	17.8	+22 44	8.0	9.4	Ma	3	..	37589i
11	1811	17.3	-31 26	8.5	9.3	Go	3	..	4108ob	61	587	17.8	+16 23	7.8	7.8	Ao	7	0,2	6674m
12	1494	17.3	-45 49	10.3	10.7	G	2	..	38413b	62	601	17.8	+11 9	6.90	6.96	A2	6	0,8	37511i
13	631	17.3	-55 7	8.1	9.0	G5	5	..	41013b	63	671	17.8	+6 39	9.2	9.2	Ao	4	..	37566i
14	250	17.3	-67 56	8.8	9.8	Ko	4	..	2043ob	64	683	17.8	+4 23	8.4	8.8	F5	3	..	4618ob
15	180	17.4	+75 23	9.5	10.5	Ko	2	..	6449m	65	898	17.8	-19 39	8.3	8.9	F5	5	..	2381ob
16	872	17.4	+35 1	7.77	8.05	Fo	4	..	10405i	66	897	17.8	-19 51	8.13	8.3	A5	7	..	2381ob
17	748	17.4	+20 58	9.4	10.0	Go	2	..	37589i	67	1787	17.8	-30 26	9.2	9.9	Go	3	..	41072b
18	567	17.4	+9 33	8.3	8.7	F5	5	..	37566i	68	1388	17.8	-43 3	9.2	8.9	A2	3	..	41076b
19	690	17.4	-0 47	7.8	8.8	Ko	6	..	37593i	69	1344	17.8	-47 29	8.7	9.5	G5	4	..	38413b
20	903	17.4	-10 30	8.5	8.6	A2	4	..	12378b	70	851	17.9	+34 5	6.95	6.93	B9	4	..	10405i
21	868	17.4	-11 59	9.7	10.3	G	1	..	12378b	71	691	17.9	+14 26	8.8	9.6	G5	3	..	6674m
22	771	17.4	-15 47	8.3	9.3	Ko	2	..	22166b	72	596	17.9	+3 46	8.4	9.2	G5	3	..	37593i
23	809	17.4	-22 0	7.60	8.2	Go	7	..	2381ob	73	652	17.9	-54 55	8.74	9.5	G5	4	..	41013b
24	2273	17.4	-24 31	8.9	9.5	G5	4	..	41089b	74	337	17.9	-62 41	7.9	8.9	Ko	7	..	23802b
25	320	17.4	-58 59	8.0	7.5	Ao	7	..	12036b	75	295	17.9	-72 14	8.1	8.9	G5	5	E	2054ob
26	327	17.4	-65 12	9.1	9.9	G5	3	..	2043ob	76	327	18.0	+66 57	8.9	9.9	Ko	2	..	38165i
27	259	17.4	-69 13	9.3	10.3	Ko	2	..	2043ob	77	853	18.0	+33 54	5.58	5.53	B8	..	2,8	18215c
28	265	17.4	-76 3	7.6	8.6	Ko	8	..	15162b	78	684	18.0	+24 4	6.16	6.11	B8	8	..	37589i
29	861	17.5	+41 30	6.88	6.94	A2	5	..	3701oi	79	627	18.0	-1 36	8.4	8.4	Ao	2	..	17408i
30	850	17.5	+33 38	8.0	8.3	Fo	2	..	10405i	80	804	18.0	-7 25	9.9	9.9	Ao	1	..	10595b
31	654	17.5	+24 11	7.23	7.65	F5	6	..	37589i	81	844	18.0	-8 39	8.7	9.5	G5	3	..	10595b
32	635	17.5	+21 9	9.1	9.9	G5	2	..	37589i	82	326	18.0	-61 30	9.0	10.5	K5	2	..	23802b
33	568	17.5	+9 10	8.5	9.3	G5	3	..	37566i	83	329	18.1	+67 28	8.0	8.3	F2	4	..	37556i
34	678	17.5	+9 1	8.3	8.3	Ao	5	..	37566i	84	942	18.1	+44 8	7.8	8.9	K2	2	..	38152i
35	745	17.5	+1 17	9.6	10.6	Ko	1	..	15135b	85	875	18.1	+34 18	8.8	8.9	A2	2	..	38939i
36	1683	17.5	-29 9	8.2	9.9	G5	2	..	41072b	86	854	18.1	+33 44	5.81	6.23	F5	6	0,7	10405i
37	1643	17.5	-34 4	9.1	10.3	G5	1	..	4108ob	87	706	18.1	+29 54	9.0	9.1	A2	2	2,1	38135i
38	1511	17.5	-44 32	9.9	10.7	G	2	..	41076b	88	639	18.1	+21 19	8.7	8.7	Ao	2	..	37589i
39	686	17.5	-53 11	8.3	9.9	K5	3	..	41013b	89	674	18.1	+13 36	8.2	9.0	G5	3	..	37511i
40	954	17.6	+42 29	8.8	9.9	K2	2	..	38152i	90	698	18.1	+2 52	9.2	9.8	Go	1	..	4618ob
41	658	17.6	+27 58	8.0	8.6	Go	3	..	38135i	91	694	18.1	-0 11	8.8	8.8	A	1	..	4618ob
42	751	17.6	+20 45	5.92	5.87	B8	8	0,10	37511i	92	629	18.1	-1 30	8.8	9.4	G	1	..	10594b
43	891	17.6	-5 7	7.95	8.23	Fo	5	0,3	10595b	93	1738	18.1	-32 25	9.7	9.7	G5	2	..	4108ob
44	842	17.6	-8 47	9.4	9.9	F8	2	..	10595b	94	1517	18.1	-44 41	9.7	10.1	Ao	2	..	38413b
45	1685	17.6	-29 47	9.74	10.2	G5	2	..	41072b	95	931	18.2	+45 56	7.16	6.99	B3	5	..	37406i
46	1644	17.6	-34 10	9.1	9.7	A2	3	..	4108ob	96	653	18.2	+28 48	8.0	9.4	Ma	2	..	37387i
47	1715	17.6	-37 46	7.74	9.1	G5	5	..	39655b	97	692	18.2	+14 11	9.2	10.2	Ko	2	..	6674m
48	797	17.7	+57 17	8.6	9.4	G5	3	..	38981i	98	602	18.2	+11 17	8.4	8.4	Ao	1	..	37511i
49	586	17.7	+16 32	5.68	5.74	A2	..	0,8	2326c	99	637	18.2	+7 51	8.2	9.0	G5	2	..	37566i
50	696	17.7	+2 41	7.6	7.7	A2	7	..	37593i	100	741	18.2	+0 16	9.23	10.41	K5	1	..	15135b

THE HENRY DRAPER CATALOGUE.

27800

4^h 18^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1886	m. 18.2	• -23 5	9.2	9.3	Go	4	..	23810b	51	852	m. 18.6	• -20 59	8.7	10.1	G5	2	..	23810b
2	1650	18.2	-26 8	9.1	10.3	G5	2	..	41072b	52	688	18.6	-53 10	9.4	10.4	Ko	1	..	41013b
3	1739	18.2	-32 8	10.5	9.9	Ao	2	..	41080b	53	328	18.6	-61 14	9.5	10.5	Ko	3	..	23802b
4	1539	18.2	-38 1	6.77	7.6	G5	7	..	39655b	54	272	18.6	-66 12	8.4	8.9	F8	6	..	20430b
5	1502	18.2	-45 16	7.2	8.3	G5	6	..	41076b	55	800	18.7	+57 22	6.23	6.23	Ao	7	0,8	37426i
6	327	18.2	-61 44	10.1	10.5	F5	2	..	23802b	56	881	18.7	+55 26	7.26	7.54	Fo	6	0,5	37435i
7	231	18.3	+73 44	8.0	9.1	K2	5	0,1	6449m	57	821	18.7	+52 17	7.9	8.7	G5	3	5,3	38981i
8	641	18.3	+21 30	8.0	8.4	F5	5	..	37589i	58	882	18.7	+46 50	8.0	9.2	K5	2	..	37406i
9	630	18.3	- 1 11	8.4	9.0	Go	4	..	37593i	59	592	18.7	+16 40	8.0	8.6	Go	3	..	37511i
10	895	18.3	- 5 14	7.70	8.77	K2	4	0,3	10595b	60	604	18.7	+11 56	6.70	7.70	Ko	6	0,4	37566i
11	845	18.3	- 8 20	9.4	9.5	A3	2	..	10595b	61	818	18.7	- 3 58	5.23	5.29	A2	..	R	56,77
12	845	18.3	-16 6	8.9	9.9	Ko	2	..	22166b	62	1823	18.7	-31 18	8.9	10.5	Ko	2	..	41080b
13	1692	18.3	-29 36	8.9	9.3	F2	3	..	41072b	63	1748	18.7	-32 17	10.3	10.7	Ko	2	..	41080b
14	1677	18.3	-35 8	8.50	8.8	F8	3	..	41080b	64	1465	18.7	-39 20	10.1	10.9	Go	2	..	39655b
15	1297	18.3	-49 2	7.39	7.3	A2	8	..	38413b	65	328	18.7	-65 20	9.0	9.8	G5	4	..	20430b
16	798	18.4	+58 1	8.1	8.6	F8	3	3,3	37435i	66	307	18.7	-67 31	10.0	10.4	F5	2	..	20430b
17	768	18.4	+53 23	8.5	9.1	Go	2	..	38981i	67	296	18.7	-72 12	9.0	9.8	G5	1	..	17047b
18	856	18.4	+33 21	8.5	9.7	K5	2	..	38939i	68	256	18.8	+70 3	9.29	9.35	A2	2	E	38112i
19	714	18.4	+17 13	4.84	4.98	A5	..	0,10	2326c	69	255	18.8	+69 54	8.94	9.00	A2	3	E	38112i
20	570	18.4	+ 9 14	5.06	5.12	A2	..	2, R	56,77	70	683	18.8	+ 9 6	8.8	9.6	G5	2	..	37566i
21	676	18.4	+ 6 8	8.9	9.0	A5	4	..	37566i	71	854	18.8	-21 50	9.2	10.1	Ko	2	..	23810b
22	597	18.4	+ 3 46	9.9	9.9	Ao	2	0,1	15135b	72	813	18.8	-22 21	8.1	9.8	Ko	3	..	23810b
23	837	18.4	-20 28	7.9	8.3	A2	8	..	23810b	73	1476	18.8	-42 0	8.3	8.9	B9	6	..	41076b
24	1472	18.4	-42 50	8.9	9.2	Go	3	..	41076b	74	332	18.9	+67 51	9.7	9.7	Ao	2	..	38165i
25	1345	18.4	-47 4	9.5	10.4	Go	2	..	38413b	75	888	18.9	+37 3	7.8	7.9	A5	3	5,2	38939i
26	1096	18.4	-51 16	7.6	8.0	G5	7	..	38413b	76	709	18.9	+29 35	8.8	9.1	F	2	R	38135i
27	338	18.4	-62 30	8.3	9.3	Ko	6	..	23802b	77	632	18.9	+18 40	7.41	7.39	B9	4	..	37511i
28	262	18.4	-69 34	9.1	10.1	Ko	2	..	20430b	78	678	18.9	+ 7 5	7.8	8.8	Ko	4	..	37566i
29	266	18.4	-76 14	9.1	10.3	K5	2	..	15162b	79	635	18.9	- 0 57	9.2	9.8	Go	2	..	46180b
30	407	18.5	+65 59	9.0	9.3	Fo	3	..	38165i	80	1896	18.9	-23 24	10.4	9.8	A3	3	..	23810b
31	886	18.5	+38 49	7.8	8.4	Go	4	..	38939i	81	1862	18.9	-25 7	5.98	8.3	K5	..	5,8	56,120
32	688	18.5	+22 32	8.0	8.3	F2	4	..	37589i	82	263	18.9	-68 58	9.6	9.6	Ao	4	..	20430b
33	714	18.5	+19 45	9.4	10.2	G5	1	..	37589i	83	265	18.9	-75 35	8.1	8.2	A2	6	..	15162b
34	590	18.5	+16 11	9.2	9.8	G	1	..	37511i	84	232	19.0	+73 24	8.5	9.5	Ko	3	0,2-	38165i
35	589	18.5	+16 9	8.8	9.4	Go	2	..	37511i	85	958	19.0	+40 23	8.1	8.4	F2	2	..	38152i
36	693	18.5	+14 32	7.6	8.2	Go	4	..	37511i	86	889	19.0	+36 27	8.06	8.06	Ao	4	..	38939i
37	584	18.5	+12 45	7.74	8.74	Ko	2	..	37511i	87	710	19.0	+25 32	7.71	8.13	F5	4	..	38135i
38	700	18.5	+ 2 49	8.4	9.2	G5	2	..	37593i	88	680	19.0	+ 6 36	9.2	10.2	Ko	2	..	37566i
39	632	18.5	- 1 49	8.82	9.24	F5	3	3,3	12390b	89	889	19.0	- 9 47	8.75	9.31	Go	2	..	12378b
40	887	18.5	- 2 43	9.1	9.5	F5	2	E	12390b	90	1796	19.0	-29 59	9.01	9.7	Ko	3	..	41072b
41	846	18.5	- 7 55	7.48	8.48	Ko	6	..	10595b	91	1797	19.0	-30 22	9.5	10.2	G5	1	..	41072b
42	1386	18.5	-41 26	8.1	8.3	F5	7	..	41076b	92	1305	19.0	-49 32	9.5	10.7	Ko	2	..	38413b
43	1394	18.5	-43 1	7.6	8.3	G5	6	..	41076b	93	655	19.0	-54 39	9.2	10.1	F8	2	..	41013b
44	1504	18.5	-45 51	9.9	11.5	G5	1	..	44376b	94	335	19.0	-59 39	9.4	10.5	K2	2	..	23802b
45	1309	18.5	-48 43	9.0	9.5	Go	3	..	38413b	95	108	19.0	-81 15	8.7	9.8	K2	3	..	20538b
46	933	18.6	+46 0	8.5	8.3	B3	3	R	37406i	96	84	19.0	-83 23	9.4	10.4	Ko	2	..	20538b
47	961	18.6	+43 35	8.6	9.7	K2	2	..	38152i	97	823	19.1	+52 38	8.0	8.0	Ao	4	..	38981i
48	591	18.6	+16 51	7.8	8.3	F8	4	..	37511i	98	960	19.1	+42 25	8.0	8.0	Ao	3	..	38152i
49	694	18.6	+14 30	9.6	9.6	A	1	..	6674m	99	870	19.1	+42 0	7.56	7.62	A2	3	..	37010i
50	817	18.6	- 4 21	8.1	8.2	A5	2	..	17408b	100	716	19.1	+19 50	9.2	9.5	F	2	..	37589i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

27700

4^h 17^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	848	17.2	-21 9	8.5	9.8	G5	3	..	2381ob	51	884	17.7	-2 9	8.7	9.5	G5	2	..	37594i
2	1691	17.2	-33 6	8.1	9.0	G5	3	..	4108ob	52	883	17.7	-2 28	8.5	8.6	A2	4	0,3	37593i
3	1666	17.2	-34 58	7.95	8.5	A5	5	..	4108ob	53	803	17.7	-7 46	9.2	9.3	A5	2	..	10595b
4	325	17.3	+68 9	9.5	10.3	G5	2	..	38165i	54	905	17.7	-10 16	9.1	10.2	K5	1	..	12378b
5	799	17.3	+60 2	8.26	8.54	Fo	2	..	37435i	55	862	17.7	-11 18	9.7	10.3	G	1	..	12378b
6	952	17.3	+42 26	8.6	8.6	Ao	3	..	38152i	56	1497	17.7	-45 30	9.3	9.8	A2	4	..	41076b
7	595	17.3	+3 11	8.5	8.5	B9	3	..	37593i	57	162	17.8	+77 25	7.8	8.6	G5	4	..	37558i
8	902	17.3	-10 11	8.1	9.3	K5	2	..	12378b	58	254	17.8	+71 27	8.0	8.3	Fo	2	..	37630i
9	867	17.3	-11 59	9.7	10.3	Go	2	..	12378b	59	874	17.8	+35 1	7.77	9.12	Ma	3	..	38939i
10	1642	17.3	-25 57	5.88	6.8	Fo	..	..	56,120	60	686	17.8	+22 44	8.0	9.4	Ma	3	..	37589i
11	1811	17.3	-31 26	8.5	9.3	Go	3	..	4108ob	61	587	17.8	+16 23	7.8	7.8	Ao	7	0,2	6674m
12	1494	17.3	-45 49	10.3	10.7	G	2	..	38413b	62	601	17.8	+11 9	6.90	6.96	A2	6	0,8	37511i
13	631	17.3	-55 7	8.1	9.0	G5	5	..	41013b	63	671	17.8	+6 39	9.2	9.2	Ao	4	..	37566i
14	250	17.3	-67 56	8.8	9.8	Ko	4	..	2043ob	64	683	17.8	+4 23	8.4	8.8	F5	3	..	4618ob
15	180	17.4	+75 23	9.5	10.5	Ko	2	..	6449m	65	898	17.8	-19 39	8.3	8.9	F5	5	..	2381ob
16	872	17.4	+35 1	7.77	8.05	Fo	4	..	10405i	66	897	17.8	-19 51	8.13	8.3	A5	7	..	2381ob
17	748	17.4	+20 58	9.4	10.0	Go	2	..	37589i	67	1787	17.8	-30 26	9.2	9.9	Go	3	..	41072b
18	567	17.4	+9 33	8.3	8.7	F5	5	..	37566i	68	1388	17.8	-43 3	9.2	8.9	A2	3	..	41076b
19	690	17.4	-0 47	7.8	8.8	Ko	6	..	37593i	69	1344	17.8	-47 29	8.7	9.5	G5	4	..	38413b
20	903	17.4	-10 30	8.5	8.6	A2	4	..	12378b	70	851	17.9	+34 5	6.95	6.93	B9	4	..	10405i
21	868	17.4	-11 59	9.7	10.3	G	1	..	12378b	71	691	17.9	+14 26	8.8	9.6	G5	3	..	6674m
22	771	17.4	-15 47	8.3	9.3	Ko	2	..	22166b	72	596	17.9	+3 46	8.4	9.2	G5	3	..	37593i
23	809	17.4	-22 0	7.60	8.2	Go	7	..	2381ob	73	652	17.9	-54 55	8.74	9.5	G5	4	..	41013b
24	2273	17.4	-24 31	8.9	9.5	G5	4	..	41089b	74	337	17.9	-62 41	7.9	8.9	Ko	7	..	23802b
25	320	17.4	-58 59	8.0	7.5	Ao	7	..	12036b	75	295	17.9	-72 14	8.1	8.9	G5	5	E	2054ob
26	327	17.4	-65 12	9.1	9.9	G5	3	..	2043ob	76	327	18.0	+66 57	8.9	9.9	Ko	2	..	38165i
27	259	17.4	-69 13	9.3	10.3	Ko	2	..	2043ob	77	853	18.0	+33 54	5.58	5.53	B8	..	2,8	18215c
28	265	17.4	-76 3	7.6	8.6	Ko	8	..	15162b	78	684	18.0	+24 4	6.16	6.11	B8	8	..	37589i
29	861	17.5	+41 30	6.88	6.94	A2	5	..	37010i	79	627	18.0	-1 36	8.4	8.4	Ao	2	..	17408i
30	850	17.5	+33 38	8.0	8.3	Fo	2	..	10405i	80	804	18.0	-7 25	9.9	9.9	Ao	1	..	10595b
31	654	17.5	+24 11	7.23	7.65	F5	6	..	37589i	81	844	18.0	-8 39	8.7	9.5	G5	3	..	10595b
32	635	17.5	+21 9	9.1	9.9	G5	2	..	37589i	82	326	18.0	-61 30	9.0	10.5	K5	2	..	23802b
33	568	17.5	+9 10	8.5	9.3	G5	3	..	37566i	83	329	18.1	+67 28	8.0	8.3	F2	4	..	37556i
34	678	17.5	+9 1	8.3	8.3	Ao	5	..	37566i	84	942	18.1	+44 8	7.8	8.9	K2	2	..	38152i
35	745	17.5	+1 17	9.6	10.6	Ko	1	..	15135b	85	875	18.1	+34 18	8.8	8.9	A2	2	..	38939i
36	1683	17.5	-29 9	8.2	9.9	G5	2	..	41072b	86	854	18.1	+33 44	5.81	6.23	F5	6	0,7	10405i
37	1643	17.5	-34 4	9.1	10.3	G5	1	..	4108ob	87	706	18.1	+29 54	9.0	9.1	A2	2	2,1	38135i
38	1511	17.5	-44 32	9.9	10.7	G	2	..	41076b	88	639	18.1	+21 19	8.7	8.7	Ao	2	..	37589i
39	686	17.5	-53 11	8.3	9.9	K5	3	..	41013b	89	674	18.1	+13 36	8.2	9.0	G5	3	..	37511i
40	954	17.6	+42 29	8.8	9.9	K2	2	..	38152i	90	698	18.1	+2 52	9.2	9.8	Go	1	..	4618ob
41	658	17.6	+27 58	8.0	8.6	Go	3	..	38135i	91	694	18.1	-0 11	8.8	8.8	A	1	..	4618ob
42	751	17.6	+20 45	5.92	5.87	B8	8	0,10	37511i	92	629	18.1	-1 30	8.8	9.4	G	1	..	10594b
43	891	17.6	-5 7	7.95	8.23	Fo	5	0,3	10595b	93	1738	18.1	-32 25	9.7	9.7	G5	2	..	4108ob
44	842	17.6	-8 47	9.4	9.9	F8	2	..	10595b	94	1517	18.1	-44 41	9.7	10.1	Ao	2	..	38413b
45	1685	17.6	-29 47	9.74	10.2	G5	2	..	41072b	95	931	18.2	+45 56	7.16	6.99	B3	5	..	37406i
46	1644	17.6	-34 10	9.1	9.7	A2	3	..	4108ob	96	653	18.2	+28 48	8.0	9.4	Ma	2	..	37387i
47	1715	17.6	-37 46	7.74	9.1	G5	5	..	39655b	97	692	18.2	+14 11	9.2	10.2	Ko	2	..	6674m
48	797	17.7	+57 17	8.6	9.4	G5	3	..	38981i	98	602	18.2	+11 17	8.4	8.4	Ao	1	..	37511i
49	586	17.7	+16 32	5.68	5.74	A2	..	0,8	2326c	99	637	18.2	+7 51	8.2	9.0	G5	2	..	37566i
50	696	17.7	+2 41	7.6	7.7	A2	7	..	37593i	100	741	18.2	+0 16	9.23	10.41	K5	1	..	15135b

THE HENRY DRAPER CATALOGUE.

27800

4^h 18^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1886	18.2	-23 5	9.2	9.3	Go	4	..	23810b	51	852	18.6	-20 59	8.7	10.1	G5	2	..	23810b
2	1650	18.2	-26 8	9.1	10.3	G5	2	..	41072b	52	688	18.6	-53 10	9.4	10.4	Ko	1	..	41013b
3	1739	18.2	-32 8	10.5	9.9	Ao	2	..	41080b	53	328	18.6	-61 14	9.5	10.5	Ko	3	..	23802b
4	1539	18.2	-38 1	6.77	7.6	G5	7	..	39655b	54	272	18.6	-66 12	8.4	8.9	F8	6	..	20430b
5	1502	18.2	-45 16	7.2	8.3	G5	6	..	41076b	55	800	18.7	+57 22	6.23	6.23	Ao	7	0,8	37426i
6	327	18.2	-61 44	10.1	10.5	F5	2	..	23802b	56	881	18.7	+55 26	7.26	7.54	Fo	6	0,5	37435i
7	231	18.3	+73 44	8.0	9.1	K2	5	0,1	6449m	57	821	18.7	+52 17	7.9	8.7	G5	3	5,3	38981i
8	641	18.3	+21 30	8.0	8.4	F5	5	..	37589i	58	882	18.7	+46 50	8.0	9.2	K5	2	..	37406i
9	630	18.3	- 1 11	8.4	9.0	Go	4	..	37593i	59	592	18.7	+16 40	8.0	8.6	Go	3	..	37511i
10	895	18.3	- 5 14	7.70	8.77	K2	4	0,3	10595b	60	604	18.7	+11 56	6.70	7.70	Ko	6	0,4	37566i
11	845	18.3	- 8 20	9.4	9.5	A3	2	..	10595b	61	818	18.7	- 3 58	5.23	5.29	A2	..	R	56,77
12	845	18.3	-16 6	8.9	9.9	Ko	2	..	22166b	62	1823	18.7	-31 18	8.9	10.5	Ko	2	..	41080b
13	1692	18.3	-29 36	8.9	9.3	F2	3	..	41072b	63	1748	18.7	-32 17	10.3	10.7	Ko	2	..	41080b
14	1677	18.3	-35 8	8.50	8.8	F8	3	..	41080b	64	1465	18.7	-39 20	10.1	10.9	Go	2	..	39655b
15	1297	18.3	-49 2	7.39	7.3	A2	8	..	38413b	65	328	18.7	-65 20	9.0	9.8	G5	4	..	20430b
16	798	18.4	+58 1	8.1	8.6	F8	3	3,3	37435i	66	307	18.7	-67 31	10.0	10.4	F5	2	..	20430b
17	768	18.4	+53 23	8.5	9.1	Go	2	..	38981i	67	296	18.7	-72 12	9.0	9.8	G5	1	..	17047b
18	856	18.4	+33 21	8.5	9.7	K5	2	..	38939i	68	256	18.8	+70 3	9.29	9.35	A2	2	E	38112i
19	714	18.4	+17 13	4.84	4.98	A5	..	0,10	2326c	69	255	18.8	+69 54	8.94	9.00	A2	3	E	38112i
20	570	18.4	+ 9 14	5.06	5.12	A2	..	2,R	56,77	70	683	18.8	+ 9 6	8.8	9.6	G5	2	..	37566i
21	676	18.4	+ 6 8	8.9	9.0	A5	4	..	37566i	71	854	18.8	-21 50	9.2	10.1	Ko	2	..	23810b
22	597	18.4	+ 3 46	9.9	9.9	Ao	2	0,1	15135b	72	813	18.8	-22 21	8.1	9.8	Ko	3	..	23810b
23	837	18.4	-20 28	7.9	8.3	A2	8	..	23810b	73	1476	18.8	-42 0	8.3	8.9	B9	6	..	41076b
24	1472	18.4	-42 50	8.9	9.2	Go	3	..	41076b	74	332	18.9	+67 51	9.7	9.7	Ao	2	..	38165i
25	1345	18.4	-47 4	9.5	10.4	Go	2	..	38413b	75	888	18.9	+37 3	7.8	7.9	A5	3	5,2	38939i
26	1096	18.4	-51 16	7.6	8.0	G5	7	..	38413b	76	709	18.9	+29 35	8.8	9.1	F	2	R	38135i
27	338	18.4	-62 30	8.3	9.3	Ko	6	..	23802b	77	632	18.9	+18 40	7.41	7.39	B9	4	..	37511i
28	262	18.4	-69 34	9.1	10.1	Ko	2	..	20430b	78	678	18.9	+ 7 5	7.8	8.8	Ko	4	..	37566i
29	266	18.4	-76 14	9.1	10.3	K5	2	..	15162b	79	635	18.9	- 0 57	9.2	9.8	Go	2	..	46180b
30	407	18.5	+65 59	9.0	9.3	Fo	3	..	38165i	80	1896	18.9	-23 24	10.4	9.8	A3	3	..	23810b
31	886	18.5	+38 49	7.8	8.4	Go	4	..	38939i	81	1862	18.9	-25 7	5.98	8.3	K5	..	5,8	56,120
32	688	18.5	+22 32	8.0	8.3	F2	4	..	37589i	82	263	18.9	-68 58	9.6	9.6	Ao	4	..	20430b
33	714	18.5	+19 45	9.4	10.2	G5	1	..	37589i	83	265	18.9	-75 35	8.1	8.2	A2	6	..	15162b
34	590	18.5	+16 11	9.2	9.8	G	1	..	37511i	84	232	19.0	+73 24	8.5	9.5	Ko	3	0,2	38165i
35	589	18.5	+16 9	8.8	9.4	Go	2	..	37511i	85	958	19.0	+40 23	8.1	8.4	F2	2	..	38152i
36	693	18.5	+14 32	7.6	8.2	Go	4	..	37511i	86	889	19.0	+36 27	8.06	8.06	Ao	4	..	38939i
37	584	18.5	+12 45	7.74	8.74	Ko	2	..	37511i	87	710	19.0	+25 32	7.71	8.13	F5	4	..	38135i
38	700	18.5	+ 2 49	8.4	9.2	G5	2	..	37593i	88	680	19.0	+ 6 36	9.2	10.2	Ko	2	..	37566i
39	632	18.5	- 1 49	8.82	9.24	F5	3	3,3	12390b	89	889	19.0	- 9 47	8.75	9.31	Go	2	..	12378b
40	887	18.5	- 2 43	9.1	9.5	F5	2	E	12390b	90	1796	19.0	-29 59	9.01	9.7	Ko	3	..	41072b
41	846	18.5	- 7 55	7.48	8.48	Ko	6	..	10595b	91	1797	19.0	-30 22	9.5	10.2	G5	1	..	41072b
42	1386	18.5	-41 26	8.1	8.3	F5	7	..	41076b	92	1305	19.0	-49 32	9.5	10.7	Ko	2	..	38413b
43	1394	18.5	-43 1	7.6	8.3	G5	6	..	41076b	93	655	19.0	-54 39	9.2	10.1	F8	2	..	41013b
44	1504	18.5	-45 51	9.9	11.5	G5	1	..	44376b	94	335	19.0	-59 39	9.4	10.5	K2	2	..	23802b
45	1309	18.5	-48 43	9.0	9.5	Go	3	..	38413b	95	108	19.0	-81 15	8.7	9.8	K2	3	..	20538b
46	933	18.6	+46 0	8.5	8.3	B3	3	R	37406i	96	84	19.0	-83 23	9.4	10.4	Ko	2	..	20538b
47	961	18.6	+43 35	8.6	9.7	K2	2	..	38152i	97	823	19.1	+52 38	8.0	8.0	Ao	4	..	38981i
48	591	18.6	+16 51	7.8	8.3	F8	4	..	37511i	98	960	19.1	+42 25	8.0	8.0	Ao	3	..	38152i
49	694	18.6	+14 30	9.6	9.6	A	1	..	6674m	99	870	19.1	+42 0	7.56	7.62	A2	3	..	37010i
50	817	18.6	- 4 21	8.1	8.2	A5	2	..	17408b	100	716	19.1	+19 50	9.2	9.5	F	2	..	37589i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

27900

4^h 19^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	633	19.1	+18 49	5.96	6.24	Fo	7	..	37511i	51	1317	19.5	-48 13	11.0	10.7	F5	1	..	38413b
2	585	19.1	+12 41	7.74	8.02	Fo	4	..	37511i	52	645	19.5	-57 46	8.5	9.3	F2	2	..	12036b
3	696	19.1	+ 0 1	8.93	9.43	F8	2	0,2-	12390b	53	145	19.6	+80 2	8.55	9.55	K	2	..	37558i
4	867	19.1	-17 47	8.7	9.7	Ko	1	..	22166b	54	697	19.6	- 0 34	9.2	9.3	A2	2	1,2	46180b
5	1868	19.1	-25 37	7.46	8.9	Go	5	..	41072b	55	903	19.6	- 5 6	8.5	8.5	Ao	3	..	17408b
6	1523	19.1	-28 27	8.7	10.0	K2	3	..	41072b	56	849	19.6	-16 16	8.3	9.3	Ko	5	..	22166b
7	1798	19.1	-29 58	9.43	9.9	G	2	..	41072b	57	1527	19.6	-28 4	8.1	9.8	Mb	4	5,3	41072b
8	1362	19.1	-50 14	9.0	9.5	Go	3	..	38413b	58	1703	19.6	-36 34	8.5	8.3	F8	4	..	41080b
9	140	19.2	+80 40	7.27	7.55	Fo	7	..	37558i	59	1394	19.6	-46 36	10.6	11.3	G5	1	..	38413b
10	947	19.2	+44 32	8.0	8.1	A3	3	..	38152i	60	967	19.7	+43 15	8.2	9.2	Ko	3	..	38152i
11	702	19.2	+ 2 16	7.8	8.1	Fo	6	..	37593i	61	878	19.7	+34 31	8.0	8.4	F5	2	..	10405i
12	877	19.2	-12 47	8.7	9.9	K5	2	..	12378b	62	719	19.7	+17 42	4.24	4.30	A2	..	2,10	2326c
13	892	19.2	-14 14	8.6	8.9	Fo	3	..	12378b	63	841	19.7	-20 50	8.5	10.5	K5	2	..	23810b
14	1682	19.2	-35 3	8.95	9.2	F2	2	..	41080b	64	2305	19.7	-23 57	9.1	10.7	K2	4	..	41089b
15	1695	19.2	-36 1	9.1	10.0	G5	2	..	41080b	65	1697	19.7	-28 59	9.1	9.6	G5	3	..	41072b
16	1528	19.2	-44 2	9.0	9.5	F5	5	..	41076b	66	657	19.7	-54 51	9.2	11.3	F	2	R	41013b
17	320	19.2	-63 24	7.89	8.9	Fo	5	..	20430b	67	182	19.8	+75 50	8.32	9.32	Ko	5	..	6449m
18	251	19.2	-68 33	9.1	10.1	Ko	3	..	20430b	68	995	19.8	+50 30	8.7	8.7	A	2	R	37406i
19	205	19.3	+75 4	8.77	9.84	K2	3	..	6449m	69	964	19.8	+42 42	8.0	8.8	G5	3	..	38152i
20	924	19.3	+51 46	7.72	8.90	K5	2	..	37406i	70	961	19.8	+40 55	7.90	7.88	B9	4	..	38152i
21	993	19.3	+50 59	7.9	7.9	B9	4	..	37406i	71	776	19.8	+31 13	5.33	6.33	Ko	8	..	37387i
22	773	19.3	+31 55	8.4	9.2	G5	3	..	37387i	72	692	19.8	+23 21	9.4	10.2	G5	2	E	38153i
23	688	19.3	+23 34	8.7	8.7	Ao	5	..	37589i	73	754	19.8	+20 56	8.7	9.7	Ko	2	..	37589i
24	571	19.3	+ 9 50	8.2	8.2	Ao	7	..	37566i	74	898	19.8	- 5 55	8.3	9.1	G5	3	..	10595b
25	893	19.3	-14 14	8.3	8.4	A5	5	..	12378b	75	842	19.8	-20 21	8.5	8.9	F5	6	..	23810b
26	907	19.3	-19 42	8.1	8.3	Ao	8	..	23810b	76	1713	19.8	-33 42	9.5	9.7	A	1	..	41080b
27	839	19.3	-20 29	7.9	8.9	F5	7	..	23810b	77	1553	19.8	-38 54	9.5	10.7	Go	2	..	39655b
28	1724	19.3	-37 30	9.5	10.6	Go	3	..	39655b	78	1513	19.8	-45 43	8.4	9.3	Ko	3	..	41076b
29	517	19.3	-52 3	9.5	10.6	K2	2	..	44376b	79	1320	19.8	-48 8	9.0	10.2	F8	2	..	38413b
30	336	19.3	-59 23	8.6	10.3	Ma	2	..	23802b	80	330	19.8	-61 53	9.6	9.9	F2	2	..	23802b
31	223	19.4	+72 31	9.2	9.3	A3	2	..	37630i	81	1096	19.9	+48 34	7.92	7.92	Ao	4	..	37406i
32	258	19.4	+69 9	7.02	8.02	Ko	4	E	38112i	82	777	19.9	+31 45	8.4	8.4	Ao	3	..	37387i
33	712	19.4	+29 18	8.0	9.0	Ko	2	..	38135i	83	892	19.9	- 8 59	8.3	8.9	Go	3	..	10595b
34	642	19.4	+22 4	4.36	4.44	A3	..	I, R	56,77	84	894	19.9	- 9 27	7.71	7.71	Ao	7	..	10595b
35	686	19.4	+ 4 29	9.2	10.0	G5	1	..	37593i	85	882	19.9	-12 32	8.7	8.7	Ao	5	..	12378b
36	901	19.4	- 5 44	9.1	9.7	Go	2	..	10595b	86	341	19.9	-62 54	9.6	10.6	K	1	R	23802b
37	807	19.4	- 7 12	9.7	10.8	K2	1	..	10595b	87	265	19.9	-69 21	8.4	9.5	K2	5	..	20430b
38	840	19.4	-20 16	9.1	10.5	G5	2	..	23810b	88	996	20.0	+51 2	8.6	9.4	G5	1	..	37406i
39	1685	19.4	-27 53	8.1	9.4	Go	4	5,4	41072b	89	636	20.0	+18 39	7.72	8.28	Go	3	..	37511i
40	1686	19.4	-35 41	9.7	10.0	G5	2	..	41080b	90	721	20.0	+17 48	9.9	10.9	Ko	4	..	6674m
41	1687	19.4	-35 46	6.39	7.5	G5	7	..	41080b	91	621	20.0	+15 43	6.39	6.89	F8	6	..	37511i
42	1698	19.4	-36 42	7.7	9.1	G5	4	..	41080b	92	1770	20.0	- 2 55	9.1	9.9	G5	2	..	12390b
43	1725	19.4	-37 44	9.5	11.2	G5	2	..	39655b	93	1731	20.0	-37 1	9.5	10.9	G5	2	..	39655b
44	1102	19.4	-51 43	9.7	10.2	F5	2	..	44376b	94	397	20.0	-41 28	8.9	10.1	Ko	2	..	41076b
45	264	19.4	-69 56	9.1	9.6	F8	3	..	20430b	95	338	20.0	-59 55	9.9	10.2	F	2	..	23802b
46	643	19.5	+21 58	5.42	5.70	Fo	8	R	37589i	96	331	20.0	-61 7	9.2	9.9	F2	3	..	23802b
47	606	19.5	+11 46	8.2	8.8	Go	1	..	37511i	97	253	20.0	-68 56	8.3	8.3	Ao	8	..	20430b
48	897	19.5	- 6 47	8.9	9.9	Ko	2	..	10595b	98	1661	20.1	-34 37	9.1	10.0	Go	2	..	41080b
49	1905	19.5	-23 12	9.1	9.5	Ko	4	..	23810b	99	1474	20.1	-39 6	9.7	10.7	Go	3	..	39655b
50	1758	19.5	-32 23	7.04	7.3	A2	8	..	41080b	100	1364	20.1	-40 2	9.64	9.9	F8	3	..	39655b

THE HENRY DRAPER CATALOGUE.

28000

4^h 20^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	649	20.1	-57 12	8.9	9.5	A2	3	..	20264b	51	771	20.6	+53 13	8.6	8.7	A2	1	..	37426i
2	304	20.1	-60 33	8.8	9.9	Ko	5	..	23802b	52	625	20.6	+15 23	4.60	4.74	A5	..	5,10	56,77
3	342	20.1	-62 6	8.8	10.0	K5	3	..	23802b	53	641	20.6	-1 40	6.97	7.75	G5	5	5,7	17408b
4	993	20.2	+48 5	8.0	8.8	G5	2	E	38125i	54	909	20.6	-5 19	8.05	9.12	K2	3	..	10595b
5	884	20.2	+46 39	6.71	7.27	Go	6	5,4	37406i	55	1704	20.6	-29 26	8.5	9.0	F8	5	..	41072b
6	989	20.2	+40 3	8.47	9.47	Ko	1	..	38152i	56	1768	20.6	-32 15	10.8	9.7	F5	1	..	41080b
7	722	20.2	+17 13	7.8	8.1	Fo	5	..	37511i	57	1407	20.6	-43 41	7.8	8.3	Fo	8	..	41076b
8	..	20.2	+15 32	..	..	G5	2	..	6674m	58	1521	20.6	-45 48	9.1	9.5	A2	4	..	41076b
9	749	20.2	+1 59	8.0	8.1	A3	5	..	37593i	59	689	20.6	-53 46	9.0	10.1	A2	2	..	41013b
10	912	20.2	-10 37	8.9	9.3	F5	2	..	12378b	60	255	20.6	-68 1	10.0	10.1	A3	2	..	20430b
11	1837	20.2	-31 4	8.9	10.5	K2	1	..	41080b	61	301	20.7	+70 15	9.14	9.14	A	1	E	38112i
12	1764	20.2	-32 18	10.1	9.9	G5	1	..	41080b	62	772	20.7	+53 42	8.5	8.9	F5	3	..	37406i
13	1692	20.2	-34 58	8.50	8.8	Go	3	..	41080b	63	997	20.7	+50 28	9.2	9.2	A	2	R	37406i
14	1706	20.2	-36 42	8.1	7.8	A5	5	..	41080b	64	887	20.7	+46 43	8.5	8.5	Ao	3	..	37406i
15	1366	20.2	-40 37	8.5	9.8	Ko	3	..	39655b	65	969	20.7	+42 58	7.50	8.28	G5	3	0,3	38152i
16	305	20.2	-60 3	9.39	10.0	K2	2	..	23802b	66	994	20.7	+39 27	8.0	8.5	F8	3	..	10405i
17	85	20.2	-82 51	9.0	9.6	Go	3	..	20557b	67	895	20.7	+36 18	6.85	7.63	G5	5	..	10405i
18	..	20.3	+75 29	..	..	Ko	1	..	6449m	68	598	20.7	+16 37	8.2	8.8	Go	4	..	37511i
19	224	20.3	+73 2	8.5	9.1	Go	3	0,2-	38165i	69	690	20.7	+4 54	7.25	7.67	F5	5	5,7	37593i
20	300	20.3	+70 7	7.89	8.89	Ko	3	..	38112i	70	752	20.7	+0 53	9.6	10.7	K2	2	..	15135b
21	329	20.3	+69 2	8.9	8.9	Ao	2	E	38112i	71	701	20.7	-0 17	8.2	9.2	Ko	1	..	46180b
22	409	20.3	+65 56	8.1	8.9	G5	2	..	37556i	72	899	20.7	-2 28	7.66	8.16	F8	7	2,4	37593i
23	1184	20.3	+49 14	8.5	8.5	Ao	2	..	37406i	73	911	20.7	-4 58	8.05	8.47	F5	4	..	10595b
24	696	20.3	+22 35	4.40	4.54	A5	..	R	56,77	74	910	20.7	-5 29	9.1	9.7	Go	2	..	10595b
25	575	20.3	+9 30	8.58	9.14	Go	2	..	37566i	75	859	20.7	-21 27	7.7	9.2	G5	6	..	23810b
26	649	20.3	+5 25	7.31	8.31	Ko	6	0,4	37566i	76	1706	20.7	-29 3	9.2	9.9	G5	1	..	41072b
27	819	20.3	-22 6	8.3	8.3	Ao	7	..	23810b	77	1699	20.7	-35 30	8.5	10.0	Ko	3	..	41080b
28	1664	20.3	-34 15	4.06	5.24	K5	..	R	28,197	78	1698	20.7	-35 49	10.3	10.6	G5	2	..	41080b
29	1732	20.3	-37 29	9.5	11.2	G5	1	..	39655b	79	1361	20.7	-47 6	10.6	11.3	Go	1	..	38413b
30	1475	20.3	-39 22	8.1	8.6	A2	6	..	39655b	80	183	20.8	+75 51	9.4	9.5	A5	3	..	6449m
31	343	20.3	-62 21	9.1	9.9	G5	4	..	23802b	81	206	20.8	+74 56	9.5	10.1	Go	3	..	6449m
32	266	20.3	-69 38	7.84	9.5	K2	6	..	20430b	82	994	20.8	+47 53	8.6	9.4	G5	1	E	38125i
33	644	20.4	+21 14	7.51	8.01	F8	5	..	37589i	83	977	20.8	+43 6	7.42	7.42	Ao	5	..	38152i
34	624	20.4	+15 17	7.43	7.99	Go	4	..	37511i	84	697	20.8	+22 48	9.1	9.7	Go	2	E	38153i
35	706	20.4	+2 41	8.4	9.4	Ko	1	..	37593i	85	600	20.8	+16 55	7.72	8.50	G5	3	..	37511i
36	827	20.4	-4 0	8.1	8.1	Ao	3	..	17408b	86	691	20.8	+4 8	6.53	7.53	Ko	6	..	37593i
37	906	20.4	-5 53	7.51	8.29	G5	5	..	10595b	87	753	20.8	+0 47	8.0	8.0	B8	6	..	37593i
38	780	20.4	-14 55	8.61	9.68	K2	2	..	12378b	88	912	20.8	-5 23	7.55	8.55	Ko	5	..	10595b
39	843	20.4	-20 52	9.1	10.1	Go	3	..	23810b	89	1667	20.8	-26 41	9.2	10.0	F8	2	..	17401b
40	1766	20.4	-32 14	9.5	9.1	F5	3	..	41080b	90	1536	20.8	-28 26	7.79	9.2	Ko	5	..	17401b
41	1767	20.4	-32 20	11.0	9.7	Go	2	..	41080b	91	1672	20.8	-34 31	10.1	10.6	G	1	..	41080b
42	1368	20.4	-40 30	10.5	9.6	F8	3	..	39655b	92	1523	20.8	-45 19	9.0	9.8	F2	3	..	41076b
43	636	20.4	-55 19	8.6	9.2	G5	4	..	41013b	93	324	20.8	-63 37	5.18	6.5	Ko	..	R	56,120
44	276	20.4	-66 28	8.1	8.9	G5	7	..	20430b	94	309	20.8	-67 23	10.3	11.5	K5	1	..	20430b
45	163	20.5	+76 12	9.5	10.5	Ko	3	..	6449m	95	184	20.9	+75 48	9.27	10.34	K2	3	..	6449m
46	860	20.5	+33 44	9.0	10.1	K2	1	0,1	38939i	96	683	20.9	+62 29	7.9	8.0	A3	7	..	37556i
47	1476	20.5	-39 49	9.5	10.7	F5	2	..	39655b	97	773	20.9	+54 48	7.71	8.21	F8	5	0,4-	37406i
48	1481	20.5	-42 12	8.6	9.5	F5	3	..	41076b	98	1097	20.9	+49 0	8.0	9.1	K2	2	..	37406i
49	1314	20.5	-49 28	10.1	11.3	Ko	1	..	44376b	99	601	20.9	+16 31	8.0	8.6	Go	3	..	37511i
50	1370	20.5	-50 41	10.1	10.6	Go	2	..	44376b	100	697	20.9	+14 29	4.94	5.94	Ko	..	5,7 R	56,77

ANNALS OF HARVARD COLLEGE OBSERVATORY.

28100

4^h 20^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	754	20.9	+ 0 26	9.2	10.3	K ₂	2	0.1	12390b	51	692	21.3	+ 4 21	9.2	9.3	A ₂	2	..	46180b
2	917	20.9	-10 10	6.96	8.14	K ₅	6	0.6	10595b	52	873	21.3	-11 24	9.4	10.5	K ₂	1	..	12378b
3	916	20.9	-10 49	8.7	9.5	G ₅	2	..	12378b	53	1403	21.3	-46 12	9.9	11.0	F ₈	2	..	44376b
4	2316	20.9	-24 32	9.9	11.2	K ₀	2	..	41089b	54	1404	21.3	-46 52	7.1	7.5	F ₅	8	..	38413b
5	1842	20.9	-31 44	9.2	9.4	A ₀	2	..	41080b	55	1366	21.3	-46 59	9.1	10.4	G ₀	3	..	38413b
6	1673	20.9	-34 47	10.1	10.6	G ₀	1	..	41080b	56	85	21.3	-83 22	8.9	8.9	A ₀	5	..	20557b
7	1372	20.9	-40 17	7.3	7.5	B ₉	7	..	12287b	57	65	21.4	+85 29	8.6	9.0	F ₅	2	E	38330i
8	1112	20.9	-51 15	8.9	9.8	K ₀	3	..	41001b	58	709	21.4	+ 2 49	8.8	8.9	A ₂	2	..	37593i
9	256	20.9	-68 20	9.2	9.8	G ₀	3	..	20430b	59	702	21.4	- 0 44	7.50	8.57	K ₂	4	..	37593i
10	294	20.9	-70 41	8.5	9.5	K ₀	5	..	20430b	60	880	21.4	-13 31	8.1	8.5	F ₅	4	..	12378b
11	411	21.0	+65 40	8.8	10.0	K ₅	2	..	38165i	61	1720	21.4	-32 56	8.8	9.7	G ₅	3	..	41080b
12	747	21.0	+58 19	8.8	8.8	A	3	R	37435i	62	1565	21.4	-38 33	8.8	9.2	G ₀	4	..	39655b
13	682	21.0	+14 0	9.2	9.8	G ₀	2	..	37511i	63	1479	21.4	-39 30	9.9	10.7	F ₈	2	..	39655b
14	687	21.0	+ 8 22	5.99	5.87	B ₅	..	3,10	56,77	64	1542	21.4	-44 15	8.1	7.6	A ₀	7	..	41076b
15	853	21.0	-16 39	7.7	8.7	K ₀	6	..	22166b	65	1367	21.4	-47 40	9.2	10.4	K ₀	2	..	38413b
16	875	21.0	-17 25	8.3	9.5	K ₅	3	..	22166b	66	658	21.4	-54 4	9.5	10.1	G	1	..	41013b
17	832	21.0	-18 46	8.9	9.4	F ₈	4	..	23810b	67	114	21.5	+83 50	7.36	8.36	K ₀	4	..	37558i
18	1401	21.0	-41 2	8.9	9.2	F ₅	4	..	39655b	68	451	21.5	+64 14	var.	var.	Ma	..	R	M
19	1317	21.0	-49 22	10.3	10.7	G ₅	2	..	44376b	69	882	21.5	+34 48	8.0	9.0	K ₀	3	..	38939i
20	233	21.1	+73 9	9.7	9.8	A ₅	2	..	6449m	70	658	21.5	+24 50	9.0	9.0	A	2	E	38153i
21	302	21.1	+70 22	7.74	8.74	K ₀	3	..	37630i	71	685	21.5	+ 6 52	7.15	7.93	G ₅	7	..	37566i
22	449	21.1	+64 50	8.0	8.3	F ₀	5	..	37556i	72	835	21.5	-18 6	7.7	8.7	K ₀	5	..	23810b
23	504	21.1	+64 2	9.0	9.0	A ₀	2	..	37556i	73	1543	21.5	-28 42	8.3	9.5	K ₀	3	5,3	17401b
24	602	21.1	+16 48	7.13	8.13	K ₀	4	..	37511i	74	1320	21.5	-49 9	8.5	9.5	G ₅	4	R	38413b
25	864	21.1	-21 12	8.7	8.9	F ₀	6	..	23810b	75	716	21.6	+61 52	8.6	8.7	A ₅	3	..	37556i
26	1708	21.1	-29 38	8.9	9.7	G ₅	2	..	41072b	76	751	21.6	+58 45	8.5	9.1	G ₀	2	..	38136i
27	1702	21.1	-35 30	10.1	11.2	K	1	..	41080b	77	752	21.6	+58 26	8.5	8.9	F ₅	2	..	38136i
28	1710	21.1	-36 1	9.7	9.1	F ₅	4	..	41080b	78	875	21.6	+41 35	8.0	8.8	G ₅	2	..	38152i
29	1741	21.1	-37 3	9.9	9.7	F ₅	3	..	39655b	79	896	21.6	+38 12	8.5	9.3	G ₅	1	..	38939i
30	1740	21.1	-37 50	8.3	10.0	G ₅	4	..	39655b	80	757	21.6	+ 0 10	9.23	9.57	F ₂	2	..	12390b
31	1363	21.1	-47 23	7.7	9.5	K ₀	4	..	38413b	81	831	21.6	- 3 59	8.1	8.4	F ₀	4	..	12390b
32	345	21.1	-62 4	8.5	9.6	K ₂	4	..	23802b	82	1334	21.6	-48 22	9.0	9.8	G ₀	3	..	38413b
33	331	21.2	+66 23	8.8	8.8	A ₀	3	2,2	38907i	83	346	21.6	-62 46	8.9	9.2	F ₂	7	3,3	23802b
34	830	21.2	+52 9	7.60	7.48	B ₅	5	..	37406i	84	506	21.7	+63 12	8.4	8.9	F ₈	3	..	37556i
35	796	21.2	+32 37	9.4	9.4	A ₀	2	..	37387i	85	919	21.7	-10 46	7.9	8.7	G ₅	6	0,2	12685b
36	695	21.2	+23 16	8.8	9.4	G ₀	2	E	38153i	86	R	21.7	-22 53	9.5	9.6	F ₈	4	..	23810b
37	756	21.2	+20 46	8.7	9.5	G ₅	2	..	38153i	87	1710	21.7	-35 53	7.7	8.5	G ₀	6	..	41080b
38	721	21.2	+19 37	7.70	7.70	A ₀	5	..	37589i	88	1321	21.7	-49 31	10.1	11.0	K ₀	1	..	44376b
39	637	21.2	+18 52	7.72	8.28	G ₀	3	..	37511i	89	1100	21.8	+48 50	8.5	9.3	G ₅	2	0,1	37406i
40	578	21.2	+ 9 10	7.99	7.94	B ₈	5	..	37566i	90	603	21.8	+ 4 3	8.9	8.9	A ₀	4	..	46180b
41	786	21.2	-15 53	7.9	9.0	K ₂	3	..	22166b	91	753	21.8	+ 1 52	6.37	7.37	K ₀	..	0,6	56,77
42	1709	21.2	-29 6	9.4	9.4	F ₂	4	..	41072b	92	903	21.8	- 1 57	8.7	9.3	G ₀	5	..	37593i
43	1704	21.2	-34 58	6.55	6.5	F ₅	8	..	41080b	93	917	21.8	- 5 10	8.1	9.2	K ₂	4	..	10595b
44	1703	21.2	-35 21	10.3	10.3	G ₀	1	..	41080b	94	906	21.8	- 6 38	8.1	8.9	G ₅	5	..	10595b
45	1711	21.2	-36 41	9.1	10.0	F ₅	2	..	39655b	95	1714	21.8	-28 58	9.2	9.3	F ₅	4	0,3	41072b
46	1376	21.2	-40 27	9.7	9.6	G ₀	4	..	39655b	96	1713	21.8	-35 4	8.30	10.0	K ₅	1	..	41080b
47	1527	21.2	-45 9	9.3	10.4	G ₀	2	..	41076b	97	1711	21.8	-35 5	9.59	10.0	G ₀	1	..	41080b
48	1375	21.2	-50 53	9.9	10.7	K ₀	2	..	44376b	98	1566	21.8	-38 45	9.5	9.8	F ₈	3	..	39655b
49	699	21.3	+22 46	5.41	5.29	B ₅	..	3,10	56,77	99	1530	21.8	-44 57	8.90	9.5	G ₅	3	..	41076b
50	724	21.3	+17 58	6.74	6.74	A ₀	4	..	37511i	100	1381	21.8	-50 3	10.3	11.0	K ₀	1	..	44376b

THE HENRY DRAPER CATALOGUE.

28200

4^h 21^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	268	m. 21.8	° -69 50	8.56	8.7	Fo	6	..	20430b	51	1820	m. 22.3	° -30 33	8.17	9.1	Ko	4	..	41080b
2	261	21.8	-71 9	9.2	10.4	K5	1	E	20430b	52	1853	22.3	-31 8	9.5	11.1	K2	1	..	41080b
3	269	21.8	-75 58	8.0	8.6	Go	6	..	15162b	53	1386	22.3	-40 3	8.50	9.6	Mb	3	..	39655b
4	227	21.9	+72 20	5.97	6.11	A5	8	..	37630i	54	1385	22.3	-50 51	7.6	8.6	G5	7	..	41001b
5	627	21.9	+15 22	8.0	8.6	Go	4	..	37511i	55	659	22.3	-57 17	6.54	7.4	Go	7	0,10	12036b
6	904	21.9	-2 24	8.7	9.7	Ko	3	0,3-	10594b	56	157	22.4	+78 48	7.34	7.62	Fo	6	..	37558i
7	775	21.9	-3 8	9.1	10.3	K5	2	..	12390b	57	806	22.4	+57 11	var.	var.	Mb	2	R	37435i
8	813	21.9	-7 6	7.27	7.25	B9	7	..	17408b	58	685	22.4	+13 38	9.4	10.2	G5	1	..	37511i
9	917	21.9	-19 54	9.38	10.1	G5	2	..	23810b	59	583	22.4	+9 47	8.13	8.19	A2	3	..	37566i
10	824	21.9	-22 3	9.4	9.9	F8	3	..	23810b	60	905	22.4	-2 15	8.8	10.2	Ma	2	0,1	12390b
11	1920	21.9	-23 20	9.7	9.6	Go	3	..	23810b	61	911	22.4	-6 4	8.0	8.0	Ao	5	..	17408b
12	234	22.0	+73 59	9.4	10.5	K2	1	..	6449m	62	899	22.4	-9 8	8.3	8.3	Ao	5	..	10595b
13	973	22.0	+42 29	7.27	7.61	F2	6	..	38152i	63	839	22.4	-18 36	8.3	9.4	K2	3	..	23810b
14	877	22.0	+41 30	9.0	10.1	K2	..	..	M	64	840	22.4	-18 52	7.14	7.64	F8	4	0,10	8862b
15	867	22.0	+33 59	7.7	8.5	G5	3	..	37387i	65	872	22.4	-21 39	9.7	11.2	K5	1	..	23810b
16	727	22.0	+17 30	10.6	11.8	K5	1	..	6674m	66	1720	22.4	-35 16	9.1	10.6	Ko	1	..	41080b
17	577	22.0	+10 59	5.84	5.79	B8	8	..	37511i	67	167	22.4	-77 18	9.0	10.0	Ko	3	..	15162b
18	686	22.0	+6 50	7.59	8.01	F5	7	..	37566i	68	207	22.5	+74 44	9.2	9.5	F2	4	3,1	6449m
19	778	22.0	-3 21	8.8	9.8	Ko	1	..	12390b	69	303	22.5	+70 15	8.74	8.80	A2	2	..	38165i
20	814	22.0	-7 49	9.1	9.1	Ao	2	..	10595b	70	684	22.5	+62 19	8.6	8.7	A2	2	R	38907i
21	869	22.0	-21 12	8.5	9.5	G5	4	..	23810b	71	665	22.5	+30 9	6.26	6.68	F5	8	..	37387i
22	868	22.0	-21 44	9.1	10.1	Ko	2	..	23810b	72	702	22.5	+22 56	9.1	9.2	A2	2	..	38153i
23	280	22.0	-65 58	9.5	9.8	F2	5	..	20430b	73	1854	22.5	-31 1	9.7	10.4	A3	1	..	41080b
24	717	22.1	+61 23	8.5	8.6	A5	4	2,3-	38907i	74	1689	22.5	-34 22	9.1	10.3	Go	2	..	41080b
25	660	22.1	+27 34	7.76	7.76	Ao	3	..	37387i	75	1688	22.5	-34 56	9.45	10.0	Go	1	..	41080b
26	647	22.1	+21 24	5.74	5.88	A5	10	..	37589i	76	1388	22.5	-40 15	10.3	9.9	Go	3	..	39655b
27	700	22.1	+14 55	9.9	10.7	G5	1	..	6674m	77	1405	22.5	-41 3	9.7	8.9	A2	4	..	39655b
28	604	22.1	+3 16	9.2	9.5	F	2	..	15135b	78	1533	22.5	-45 48	9.7	10.1	A	3	E	41076b
29	1924	22.1	-23 15	10.6	10.1	F5	2	..	23810b	79	1119	22.5	-51 8	8.4	8.6	Fo	6	..	41001b
30	2337	22.1	-24 39	9.9	10.7	Go	2	E	41089b	80	889	22.6	+46 13	7.8	7.8	Ao	3	0,3	37406i
31	1723	22.1	-33 11	8.8	9.6	Ko	3	..	41080b	81	883	22.6	+35 2	7.47	7.53	A2	6	2,5	37387i
32	1747	22.1	-37 31	9.5	10.0	F8	3	..	39655b	82	701	22.6	+14 52	9.4	9.9	F8	3	..	6674m
33	1569	22.1	-38 17	9.7	10.1	F5	2	..	39655b	83	584	22.6	+9 50	7.44	7.44	Ao	6	..	37566i
34	1419	22.1	-43 14	10.1	10.4	A2	4	..	20647b	84	648	22.6	+7 56	6.96	6.91	B8	7	..	37566i
35	296	22.1	-70 7	9.56	9.8	F8	3	..	20430b	85	863	22.6	-8 38	8.9	8.9	Ao	4	..	10595b
36	628a	22.2	+15 49	var.	var.	Ma	1	R	6674m	86	1709	22.6	-27 29	9.1	10.0	Go	2	..	17401b
37	614	22.2	+11 32	7.44	7.94	F8	4	..	37511i	87	1721	22.6	-29 11	8.9	9.6	G5	3	5,3-	14649b
38	687	22.2	+6 23	9.2	9.2	Ao	2	..	46180b	88	1573	22.6	-38 27	11.0	10.1	Go	2	..	39655b
39	758	22.2	+0 12	9.28	9.36	A3	2	2,1	46180b	89	1570	22.6	-38 54	10.1	10.1	G	2	..	39655b
40	780	22.2	-3 25	8.5	9.5	Ko	3	..	12390b	90	1123	22.6	-51 42	9.5	11.0	Ma	1	..	44376b
41	903	22.2	-14 51	8.16	9.34	K5	2	..	12378b	91	727	22.7	+19 31	8.8	9.6	G5	2	..	38920i
42	871	22.2	-21 54	9.9	10.1	B9	3	..	23810b	92	605	22.7	+16 8	5.29	6.07	G5	8	..	37511i
43	1676	22.2	-26 31	8.1	9.5	K2	4	..	17401b	93	630	22.7	+16 5	8.6	9.7	K2	3	..	6674m
44	1420	22.2	-43 23	9.0	9.5	G5	4	..	41076b	94	702	22.7	+14 30	5.97	6.25	Fo	8	..	37511i
45	1421	22.2	-43 54	9.0	10.1	G5	3	..	41076b	95	605	22.7	+3 20	9.2	10.2	Ko	1	..	15135b
46	1546	22.2	-44 23	6.23	6.5	F8	..	3,10	28,197	96	1931	22.7	-23 11	8.5	9.3	Ko	3	..	23810b
47	667	22.2	-56 4	7.7	9.2	Ko	4	..	41013b	97	1855	22.7	-31 7	9.2	9.9	Ko	2	..	41080b
48	658	22.2	-57 29	7.2	7.5	Ao	7	0,8	12036b	98	1492	22.7	-42 38	9.0	9.8	A5	4	..	41076b
49	648	22.3	+22 6	8.8	8.9	A5	2	E	37589i	99	1537	22.7	-45 4	7.54	7.4	B8	8	..	41076b
50	1927	22.3	-23 22	8.0	8.1	Ao	8	..	23810b	100	1374	22.7	-47 24	10.6	10.7	Go	2	..	38413b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

28300

4^h 22^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1337	22.7	-48 6	8.3	9.2	F5	5	..	38413b	51	509	23.2	+63 47	8.8	9.6	G5	2	..	38907i
2	282	22.7	-66 6	9.0	9.8	G5	5	..	20430b	52	835	23.2	+52 35	9.4	9.4	A	2	..	37406i
3	44	22.7	-86 26	9.8	10.1	F	2	..	15145b	53	941	23.2	+45 56	7.72	7.86	A5	4	R	38125i
4	761	22.8	+20 27	8.4	8.4	B8	6	2,6	37589i	54	661	23.2	+27 10	6.61	6.61	A0	8	..	38135i
5	640	22.8	+18 58	3.63	4.63	K0	..	O, R	56,77	55	598	23.2	+12 49	5.12	5.26	A5	..	O, R	56,77
6	728	22.8	+17 42	10.2	10.3	A3	2	..	6674m	56	660	23.2	+ 5 52	9.2	9.3	A3	3	E	37566i
7	631	22.8	+15 44	4.04	5.04	K0	..	O, R	56,77	57	880	23.2	-11 20	7.25	8.03	G5	8	..	12685b
8	703	22.8	+14 50	9.4	10.5	K2	1	..	6674m	58	1396	23.2	-40 45	6.78	7.8	A0	8	..	12287b
9	585	22.8	+ 9 56	var.	var.	Md	..	R	M	59	1387	23.2	-50 27	8.6	9.5	G5	3	..	41001b
10	864	22.8	- 8 25	8.3	9.4	K2	3	..	10595b	60	266	23.2	-75 38	9.0	10.0	K0	3	..	15162b
11	896	22.8	-12 52	8.7	8.8	A2	3	..	12378b	61	143	23.3	+80 57	8.9	9.7	G5	2	..	37558i
12	2343	22.8	-24 18	6.14	7.3	A2	8	O, IO	17401b	62	..	23.3	+76 4	..	..	K0	1	..	6449m
13	1728	22.8	-33 2	6.72	7.4	F0	7	..	41080b	63	633	23.3	+15 57	6.58	7.08	F8	5	..	37511i
14	1576	22.8	-38 31	10.1	10.4	Go	2	..	39655b	64	925	23.3	- 5 35	9.4	9.7	F0	2	..	12685b
15	1377	22.8	-47 44	10.6	11.3	Go	1	..	38413b	65	887	23.3	-13 42	8.3	8.3	B9	4	..	12378b
16	297	22.8	-70 54	9.7	10.1	F5	2	E	20430b	66	845	23.3	-18 20	8.6	9.6	K0	4	..	23810b
17	507	22.9	+64 2	9.2	9.8	Go	2	..	38907i	67	929	23.3	-19 35	8.1	9.2	Go	6	..	23810b
18	508	22.9	+63 37	9.4	9.9	F8	2	..	38907i	68	2354	23.3	-24 41	7.9	9.4	Go	6	..	17401b
19	632	22.9	+15 39	3.62	3.90	F0	..	O, R	3082c	69	1127	23.3	-51 55	9.2	10.1	K0	3	..	44376b
20	597	22.9	+12 10	8.6	9.0	F5	1	..	37511i	70	328	23.3	-64 25	9.2	9.8	Go	5	..	20430b
21	616	22.9	+11 26	7.54	8.54	K0	2	..	37511i	71	329	23.3	-64 30	9.5	9.9	F5	5	..	20430b
22	755	22.9	+ 1 38	6.12	7.12	K0	..	5,5	56,77	72	228	23.4	+72 44	8.6	9.6	K0	3	..	38165i
23	762	22.9	+ 0 9	9.48	10.04	G	2	..	12390b	73	413	23.4	+66 3	8.4	9.2	G5	4	O,3	38165i
24	1888	22.9	-25 15	9.9	10.6	G5	3	O, I	41089b	74	807	23.4	+57 59	8.8	8.9	A5	3	..	38981i
25	1722	22.9	-29 34	9.2	9.7	Go	3	..	41072b	75	757	23.4	+ 1 9	5.50	5.45	B8	..	3,9	56,77
26	1827	22.9	-30 14	8.2	9.7	K0	3	..	41080b	76	764	23.4	+ 0 32	9.9	10.7	G5	3	5,2	12390b
27	1578	22.9	-38 49	8.9	8.9	Go	4	..	39655b	77	903	23.4	-12 13	8.3	8.4	A5	4	5,6	8862b
28	1126	22.9	-51 45	9.7	10.7	K0	2	..	44376b	78	1863	23.4	-31 16	8.7	9.0	F0	3	..	41080b
29	521	22.9	-52 10	8.0	9.2	K0	4	..	41001b	79	1729	23.4	-35 38	10.5	11.2	K0	1	..	41080b
30	351	22.9	-62 23	9.5	10.5	K0	2	..	23802b	80	1732	23.4	-36 44	9.5	10.9	F8	1	..	39655b
31	327	22.9	-63 32	9.31	9.8	F8	4	..	20430b	81	1757	23.4	-37 13	9.7	10.9	F8	2	..	39655b
32	313	22.9	-67 38	9.5	10.3	G5	2	..	20430b	82	235	23.5	+73 12	9.4	9.4	A0	3	..	6449m
33	261	23.0	+69 23	8.4	9.2	G5	3	..	38112i	83	889	23.5	+55 39	8.8	9.3	F8	3	O,3	37435i
34	332	23.0	+68 31	9.7	10.5	G5	1	..	38165i	84	818	23.5	- 7 9	8.7	9.7	K0	1	..	10595b
35	753	23.0	+58 54	8.5	8.5	A0	3	..	38981i	85	904	23.5	-12 29	8.3	8.3	B9	4	1,5	8862b
36	941	23.0	+52 5	8.0	8.0	B9	4	..	37426i	86	794	23.5	-15 24	7.10	7.88	G5	7	..	12378b
37	715	23.0	+ 2 52	9.2	9.3	A5	2	..	15135b	87	848	23.5	-18 4	7.46	8.64	K5	5	..	23810b
38	883	23.0	-17 20	8.1	8.9	G5	4	..	22166b	88	1728	23.5	-29 26	7.7	8.4	G5	6	..	41080b
39	1552	23.0	-28 54	9.4	9.8	K2	2	..	17401b	89	1832	23.5	-30 11	8.5	9.6	K0	3	..	41080b
40	306	23.0	-60 54	8.6	10.5	K0	3	..	23802b	90	1733	23.5	-33 0	9.2	9.7	K0	2	..	41080b
41	262	23.0	-68 7	10.0	10.1	A5	2	..	20430b	91	380	23.5	-57 59	9.0	10.5	K5	1	..	20264b
42	334	23.1	+67 25	6.86	6.92	A2	5	1,7	37556i	92	334	23.6	+68 58	8.5	8.6	A2	3	..	38112i
43	652	23.1	+21 40	9.0	10.2	K5	1	..	38153i	93	1008	23.6	+39 39	8.0	9.0	K0	3	..	38152i
44	606	23.1	+17 3	7.6	8.2	Go	4	..	37511i	94	731	23.6	+17 19	7.06	7.62	Go	5	..	37511i
45	704	23.1	+14 38	8.4	8.4	A0	5	..	37511i	95	720	23.6	+ 2 9	8.2	8.6	F5	3	..	37593i
46	851	23.1	-20 36	8.5	8.9	F0	5	..	23810b	96	878	23.6	-21 44	6.73	7.3	F5	..	O, IO	56,120
47	1539	23.1	-45 31	9.7	10.1	A	2	E	41076b	97	1760	23.6	-37 50	8.8	10.0	F8	4	..	39655b
48	522	23.1	-52 41	9.6	10.4	G5	1	..	41013b	98	316	23.6	-66 59	6.9	7.0	A3	10	..	20430b
49	698	23.1	-53 21	6.92	7.5	F0	9	..	41013b	99	135	23.6	-78 17	8.6	9.6	K0	4	..	15162b
50	185	23.2	+75 58	9.9	11.0	K2	1	..	6449m	100	164	23.7	+76 11	9.4	10.4	K0	2	..	6449m

THE HENRY DRAPER CATALOGUE.

28400

4^h 23^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	457	23.7	+64 46	7.40	7.82	F5	5	..	37556i	51	1952	24.1	-23 20	8.7	9.2	B9	5	..	23810b
2	685	23.7	+62 19	8.8	9.2	F5	2	..	38907i	52	1690	24.1	-26 54	8.1	8.8	A2	6	..	17401b
3	809	23.7	+57 38	8.4	9.5	K2	3	..	37435i	53	1405	24.1	-40 42	7.2	7.6	F8	8	..	12287b
4	979	23.7	+42 33	8.6	9.1	F8	2	..	38152i	54	1383	24.1	-47 10	6.18	6.6	F5	10	..	38413b
5	805	23.7	+32 18	7.71	7.99	Fo	5	0,2	37387i	55	665	24.1	-54 29	8.7	9.5	F8	3	..	41013b
6	732	23.7	+17 39	7.06	7.56	F8	6	..	37511i	56	337	24.1	-60 59	8.5	9.0	F2	6	2,3	23802b
7	820	23.7	-7 47	8.3	8.8	F8	4	..	10595b	57	270	24.1	-75 58	8.5	8.6	A2	6	..	46167b
8	925	23.7	-10 46	8.6	9.0	F5	3	..	12685b	58	871	24.2	+33 48	8.6	9.0	F5	1	..	38939i
9	2359	23.7	-24 12	9.9	10.3	F5	3	..	23810b	59	806	24.2	+32 14	6.19	6.17	B9	7	0,9	10405i
10	1502	23.7	-42 46	9.7	10.4	Go	2	..	20647b	60	784	24.2	+31 22	8.7	8.8	A3	2	..	37387i
11	1380	23.7	-47 45	10.1	11.8	G5	1	..	38413b	61	767	24.2	+20 46	8.8	8.8	Ao	3	..	38153i
12	670	23.7	-56 36	9.8	9.9	A3	2	..	20264b	62	609	24.2	+16 26	9.9	10.9	Ko	3	0,2	6674m
13	335	23.7	-61 28	5.58	8.1	K5	..	3,6-	56,120	63	886	24.2	-11 17	8.3	8.8	F8	7	..	12685b
14	305	23.8	+70 8	7.99	7.99	Ao	5	..	38165i	64	1956	24.2	-23 41	9.5	9.2	F8	4	..	23810b
15	932	23.8	+56 59	8.5	9.5	Ko	2	..	38981i	65	1803	24.2	-32 27	10.1	9.6	Fo	2	..	41080b
16	964	23.8	+44 23	7.12	8.12	Ko	4	5,4	37406i	66	1742	24.2	-33 4	10.1	9.9	F8	1	..	41080b
17	658	23.8	+28 50	8.6	8.9	Fo	3	..	37387i	67	1746	24.2	-33 38	9.4	9.6	Go	2	..	41080b
18	1738	23.8	-33 24	8.8	9.4	Ko	3	..	41080b	68	1737	24.2	-36 52	10.3	11.4	Ko	1	..	39655b
19	1130	23.8	-51 18	9.5	9.8	Fo	2	..	41001b	69	1490	24.2	-39 29	10.1	9.9	G	2	..	39655b
20	523	23.8	-52 42	9.8	10.6	G5	1	..	41013b	70	1335	24.2	-49 34	10.1	10.4	Go	2	..	44376b
21	336	23.8	-61 51	8.9	9.0	Go	3	0,8	15186b	71	334	24.2	-64 19	8.6	9.2	Go	7	..	20430b
22	1011	23.9	+39 36	8.6	8.6	B9	3	..	38939i	72	45	24.2	-86 37	9.7	9.8	A5	4	..	15145b
23	875	23.9	+35 54	8.2	9.3	K2	1	..	38939i	73	811	24.3	+58 5	8.9	9.5	Go	2	2,2	38981i
24	688	23.9	+13 41	7.76	8.54	G5	2	..	37511i	74	877	24.3	+35 23	8.0	8.4	F5	3	..	38939i
25	1948	23.9	-22 57	10.2	10.4	K2	1	..	23810b	75	583	24.3	+10 18	6.61	6.59	B9	7	1,7	38083i
26	1688	23.9	-26 13	8.5	10.3	Ko	2	..	17401b	76	759	24.3	+1 36	9.9	10.7	G5	1	..	15135b
27	1717	23.9	-27 35	9.7	10.3	A2	2	..	17401b	77	767	24.3	+1 4	9.4	10.2	G5	1	..	15135b
28	1797	23.9	-32 38	6.90	7.3	F5	7	..	41080b	78	796	24.3	-15 12	8.8	10.0	K5	1	..	12378b
29	1761	23.9	-37 0	8.8	10.0	Ko	3	..	39655b	79	931	24.3	-19 40	6.10	7.6	Ko	10	..	23810b
30	1404	23.9	-40 25	8.1	8.3	A2	6	..	12287b	80	2369	24.3	-24 7	9.5	10.0	A5	5	..	23810b
31	1503	23.9	-42 53	8.7	9.9	G5	3	..	41076b	81	706	24.3	-53 56	8.4	8.6	F5	5	..	41013b
32	1416	23.9	-46 24	9.0	9.8	G5	3	..	38413b	82	701	24.4	+23 22	7.08	7.08	Ao	6	..	38153i
33	511	24.0	+63 57	7.03	7.81	G5	4	..	37556i	83	731	24.4	+19 37	7.15	7.57	F5	5	..	37511i
34	884	24.0	+41 45	8.2	9.0	G5	2	..	38152i	84	635	24.4	+15 57	8.00	9.35	Ma	3	0,1	6674m
35	1012	24.0	+39 55	7.97	8.75	G5	3	..	38152i	85	636	24.4	+15 25	5.70	5.98	Fo	..	0,7	56,77
36	735	24.0	+17 28	8.4	8.4	B9	5	..	37511i	86	689	24.4	+14 6	8.0	8.6	Go	4	..	37511i
37	906	24.0	-12 11	7.9	8.7	G5	4	..	12378b	87	696	24.4	+4 56	7.25	8.60	Mb	5	0,4	37566i
38	1950	24.0	-23 0	6.94	8.3	G5	8	..	23810b	88	915	24.4	-2 38	8.0	9.0	Ko	3	0,1	38063i
39	1867	24.0	-30 59	8.5	9.7	Go	2	..	41080b	89	850	24.4	-4 26	8.1	8.1	Ao	4	2,2	12685b
40	1740	24.0	-33 44	9.1	9.7	F8	2	..	41080b	90	929	24.4	-5 44	9.1	9.4	Fo	2	..	12685b
41	1562	24.0	-44 43	9.5	10.4	F5	2	..	20647b	91	928	24.4	-5 54	8.7	9.2	F8	3	..	12685b
42	1393	24.0	-50 10	9.9	9.8	A2	3	..	44376b	92	892	24.4	-13 53	8.7	9.3	Go	2	..	12378b
43	672	24.0	-56 45	8.6	9.5	G5	2	..	41013b	93	650	24.4	-55 26	8.4	9.8	Ma	3	..	41013b
44	267	24.0	-75 20	9.5	10.5	Ko	2	..	15162b	94	651	24.4	-55 39	8.8	9.8	Go	2	..	41013b
45	809	24.1	+59 39	9.2	9.2	A	2	..	38136i	95	458	24.5	+64 25	8.0	8.6	Go	4	..	37556i
46	779	24.1	+53 42	5.42	5.20	B1	..	4,R	56,77	96	944	24.5	+51 59	8.6	8.6	A	2	E	37406i
47	662	24.1	+27 55	6.64	7.42	G5	6	..	37387i	97	893	24.5	-13 17	5.50	5.33	B3p	..	R	56,78
48	608	24.1	+16 51	10.2	11.0	G5	2	..	6674m	98	1691	24.5	-26 31	8.3	9.4	G5	4	..	17401b
49	618	24.1	+11 57	8.0	8.1	A5	2	..	37511i	99	1429	24.5	-43 35	8.5	9.8	K2	4	..	20647b
50	926	24.1	-10 15	8.5	8.5	Ao	4	..	12685b	100	1418	24.5	-46 49	9.5	10.1	Ko	2	..	38413b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

28300

4^h 22^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1337	22.7	-48 6	8.3	9.2	F5	5	..	38413b	51	509	23.2	+63 47	8.8	9.6	G5	2	..	38907i
2	282	22.7	-66 6	9.0	9.8	G5	5	..	20430b	52	835	23.2	+52 35	9.4	9.4	A	2	..	37406i
3	44	22.7	-86 26	9.8	10.1	F	2	..	15145b	53	941	23.2	+45 56	7.72	7.86	A5	4	R	38125i
4	761	22.8	+20 27	8.4	8.4	B8	6	2,6	37589i	54	661	23.2	+27 10	6.61	6.61	Ao	8	..	38135i
5	640	22.8	+18 58	3.63	4.63	Ko	..	0, R	56,77	55	598	23.2	+12 49	5.12	5.26	A5	..	0, R	56,77
6	728	22.8	+17 42	10.2	10.3	A3	2	..	6674m	56	660	23.2	+ 5 52	9.2	9.3	A3	3	E	37566i
7	631	22.8	+15 44	4.04	5.04	Ko	..	0, R	56,77	57	880	23.2	-11 20	7.25	8.03	G5	8	..	12685b
8	703	22.8	+14 50	9.4	10.5	K2	1	..	6674m	58	1396	23.2	-40 45	6.78	7.8	Ao	8	..	12287b
9	585	22.8	+ 9 56	var.	var.	Md	..	R	M	59	1387	23.2	-50 27	8.6	9.5	G5	3	..	41001b
10	864	22.8	- 8 25	8.3	9.4	K2	3	..	10595b	60	266	23.2	-75 38	9.0	10.0	Ko	3	..	15162b
11	896	22.8	-12 52	8.7	8.8	A2	3	..	12378b	61	143	23.3	+80 57	8.9	9.7	G5	2	..	37558i
12	2343	22.8	-24 18	6.14	7.3	A2	8	0,10	17401b	62	..	23.3	+76 4	..	..	Ko	1	..	6449m
13	1728	22.8	-33 2	6.72	7.4	Fo	7	..	41080b	63	633	23.3	+15 57	6.58	7.08	F8	5	..	37511i
14	1576	22.8	-38 31	10.1	10.4	Go	2	..	39655b	64	925	23.3	- 5 35	9.4	9.7	Fo	2	..	12685b
15	1377	22.8	-47 44	10.6	11.3	Go	1	..	38413b	65	887	23.3	-13 42	8.3	8.3	B9	4	..	12378b
16	297	22.8	-70 54	9.7	10.1	F5	2	E	20430b	66	845	23.3	-18 20	8.6	9.6	Ko	4	..	23810b
17	507	22.9	+64 2	9.2	9.8	Go	2	..	38907i	67	929	23.3	-19 35	8.1	9.2	Go	6	..	23810b
18	508	22.9	+63 37	9.4	9.9	F8	2	..	38907i	68	2354	23.3	-24 41	7.9	9.4	Go	6	..	17401b
19	632	22.9	+15 39	3.62	3.90	Fo	..	0, R	3082c	69	1127	23.3	-51 55	9.2	10.1	Ko	3	..	44376b
20	597	22.9	+12 10	8.6	9.0	F5	1	..	37511i	70	328	23.3	-64 25	9.2	9.8	Go	5	..	20430b
21	616	22.9	+11 26	7.54	8.54	Ko	2	..	37511i	71	329	23.3	-64 30	9.5	9.9	F5	5	..	20430b
22	755	22.9	+ 1 38	6.12	7.12	Ko	..	5,5	56,77	72	228	23.4	+72 44	8.6	9.6	Ko	3	..	38165i
23	762	22.9	+ 0 9	9.48	10.04	G	2	..	12390b	73	413	23.4	+66 3	8.4	9.2	G5	4	0,3	38165i
24	1888	22.9	-25 15	9.9	10.6	G5	3	0,1	41089b	74	807	23.4	+57 59	8.8	8.9	A5	3	..	38981i
25	1722	22.9	-29 34	9.2	9.7	Go	3	..	41072b	75	757	23.4	+ 1 9	5.50	5.45	B8	..	3,9	56,77
26	1827	22.9	-30 14	8.2	9.7	Ko	3	..	41080b	76	764	23.4	+ 0 32	9.9	10.7	G5	3	5,2	12390b
27	1578	22.9	-38 49	8.9	8.9	Go	4	..	39655b	77	903	23.4	-12 13	8.3	8.4	A5	4	5,6	8862b
28	1126	22.9	-51 45	9.7	10.7	Ko	2	..	44376b	78	1863	23.4	-31 16	8.7	9.0	Fo	3	..	41080b
29	521	22.9	-52 10	8.0	9.2	Ko	4	..	41001b	79	1729	23.4	-35 38	10.5	11.2	Ko	1	..	41080b
30	351	22.9	-62 23	9.5	10.5	Ko	2	..	23802b	80	1732	23.4	-36 44	9.5	10.9	F8	1	..	39655b
31	327	22.9	-63 32	9.31	9.8	F8	4	..	20430b	81	1757	23.4	-37 13	9.7	10.9	F8	2	..	39655b
32	313	22.9	-67 38	9.5	10.3	G5	2	..	20430b	82	235	23.5	+73 12	9.4	9.4	Ao	3	..	6449m
33	261	23.0	+69 23	8.4	9.2	G5	3	..	38112i	83	889	23.5	+55 39	8.8	9.3	F8	3	0,3	37435i
34	332	23.0	+68 31	9.7	10.5	G5	1	..	38165i	84	818	23.5	- 7 9	8.7	9.7	Ko	1	..	10595b
35	753	23.0	+58 54	8.5	8.5	Ao	3	..	38981i	85	904	23.5	-12 29	8.3	8.3	B9	4	1,5	8862b
36	941	23.0	+52 5	8.0	8.0	B9	4	..	37426i	86	794	23.5	-15 24	7.10	7.88	G5	7	..	12378b
37	715	23.0	+ 2 52	9.2	9.3	A5	2	..	15135b	87	848	23.5	-18 4	7.46	8.64	K5	5	..	23810b
38	883	23.0	-17 20	8.1	8.9	G5	4	..	22166b	88	1728	23.5	-29 26	7.7	8.4	G5	6	..	41080b
39	1552	23.0	-28 54	9.4	9.8	K2	2	..	17401b	89	1832	23.5	-30 11	8.5	9.6	Ko	3	..	41080b
40	306	23.0	-60 54	8.6	10.5	Ko	3	..	23802b	90	1733	23.5	-33 0	9.2	9.7	Ko	2	..	41080b
41	262	23.0	-68 7	10.0	10.1	A5	2	..	20430b	91	380	23.5	-57 59	9.0	10.5	K5	1	..	20264b
42	334	23.1	+67 25	6.86	6.92	A2	5	1,7	37556i	92	334	23.6	+68 58	8.5	8.6	A2	3	..	38112i
43	652	23.1	+21 40	9.0	10.2	K5	1	..	38153i	93	1008	23.6	+39 39	8.0	9.0	Ko	3	..	38152i
44	606	23.1	+17 3	7.6	8.2	Go	4	..	37511i	94	731	23.6	+17 19	7.06	7.62	Go	5	..	37511i
45	704	23.1	+14 38	8.4	8.4	Ao	5	..	37511i	95	720	23.6	+ 2 9	8.2	8.6	F5	3	..	37593i
46	851	23.1	-20 36	8.5	8.9	Fo	5	..	23810b	96	878	23.6	-21 44	6.73	7.3	F5	..	0,10	56,120
47	1539	23.1	-45 31	9.7	10.1	A	2	E	41076b	97	1760	23.6	-37 50	8.8	10.0	F8	4	..	39655b
48	522	23.1	-52 41	9.6	10.4	G5	1	..	41013b	98	316	23.6	-66 59	6.9	7.0	A3	10	..	20430b
49	698	23.1	-53 21	6.92	7.5	Fo	9	..	41013b	99	135	23.6	-78 17	8.6	9.6	Ko	4	..	15162b
50	185	23.2	+75 58	9.9	11.0	K2	1	..	6449m	100	164	23.7	+76 11	9.4	10.4	Ko	2	..	6449m

THE HENRY DRAPER CATALOGUE.

28400

4^h 23^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	457	23.7	+64 46	7.40	7.82	F5	5	..	37556i	51	1952	24.1	-23 20	8.7	9.2	B9	5	..	23810b
2	685	23.7	+62 19	8.8	9.2	F5	2	..	38907i	52	1690	24.1	-26 54	8.1	8.8	A2	6	..	17401b
3	809	23.7	+57 38	8.4	9.5	K2	3	..	37435i	53	1405	24.1	-40 42	7.2	7.6	F8	8	..	12287b
4	979	23.7	+42 33	8.6	9.1	F8	2	..	38152i	54	1383	24.1	-47 10	6.18	6.6	F5	10	..	38413b
5	805	23.7	+32 18	7.71	7.99	Fo	5	0,2	37387i	55	665	24.1	-54 29	8.7	9.5	F8	3	..	41013b
6	732	23.7	+17 39	7.06	7.56	F8	6	..	37511i	56	337	24.1	-60 59	8.5	9.0	F2	6	2,3	23802b
7	820	23.7	-7 47	8.3	8.8	F8	4	..	10595b	57	270	24.1	-75 58	8.5	8.6	A2	6	..	46167b
8	925	23.7	-10 46	8.6	9.0	F5	3	..	12685b	58	871	24.2	+33 48	8.6	9.0	F5	1	..	38939i
9	2359	23.7	-24 12	9.9	10.3	F5	3	..	23810b	59	806	24.2	+32 14	6.19	6.17	B9	7	0,9	10405i
10	1502	23.7	-42 46	9.7	10.4	Go	2	..	20647b	60	784	24.2	+31 22	8.7	8.8	A3	2	..	37387i
11	1380	23.7	-47 45	10.1	11.8	G5	1	..	38413b	61	767	24.2	+20 46	8.8	8.8	Ao	3	..	38153i
12	670	23.7	-56 36	9.8	9.9	A3	2	..	20264b	62	609	24.2	+16 26	9.9	10.9	Ko	3	0,2	6674m
13	335	23.7	-61 28	5.58	8.1	K5	..	3,6-	56,120	63	886	24.2	-11 17	8.3	8.8	F8	7	..	12685b
14	305	23.8	+70 8	7.99	7.99	Ao	5	..	38165i	64	1956	24.2	-23 41	9.5	9.2	F8	4	..	23810b
15	932	23.8	+56 59	8.5	9.5	Ko	2	..	38981i	65	1803	24.2	-32 27	10.1	9.6	Fo	2	..	41080b
16	964	23.8	+44 23	7.12	8.12	Ko	4	5,4	37406i	66	1742	24.2	-33 4	10.1	9.9	F8	1	..	41080b
17	658	23.8	+28 50	8.6	8.9	Fo	3	..	37387i	67	1746	24.2	-33 38	9.4	9.6	Go	2	..	41080b
18	1738	23.8	-33 24	8.8	9.4	Ko	3	..	41080b	68	1737	24.2	-36 52	10.3	11.4	Ko	1	..	39655b
19	1130	23.8	-51 18	9.5	9.8	Fo	2	..	41001b	69	1490	24.2	-39 29	10.1	9.9	G	2	..	39655b
20	523	23.8	-52 42	9.8	10.6	G5	1	..	41013b	70	1335	24.2	-49 34	10.1	10.4	Go	2	..	44376b
21	336	23.8	-61 51	8.9	9.0	Go	3	0,8	15186b	71	334	24.2	-64 19	8.6	9.2	Go	7	..	20430b
22	1011	23.9	+39 36	8.6	8.6	B9	3	..	38939i	72	45	24.2	-86 37	9.7	9.8	A5	4	..	15145b
23	875	23.9	+35 54	8.2	9.3	K2	1	..	38939i	73	811	24.3	+58 5	8.9	9.5	Go	2	2,2	38981i
24	688	23.9	+13 41	7.76	8.54	G5	2	..	37511i	74	877	24.3	+35 23	8.0	8.4	F5	3	..	38939i
25	1948	23.9	-22 57	10.2	10.4	K2	1	..	23810b	75	583	24.3	+10 18	6.61	6.59	B9	7	1,7	38083i
26	1688	23.9	-26 13	8.5	10.3	Ko	2	..	17401b	76	759	24.3	+1 36	9.9	10.7	G5	1	..	15135b
27	1717	23.9	-27 35	9.7	10.3	A2	2	..	17401b	77	767	24.3	+1 4	9.4	10.2	G5	1	..	15135b
28	1797	23.9	-32 38	6.90	7.3	F5	7	..	41080b	78	796	24.3	-15 12	8.8	10.0	K5	1	..	12378b
29	1761	23.9	-37 0	8.8	10.0	Ko	3	..	39655b	79	931	24.3	-19 40	6.10	7.6	Ko	10	..	23810b
30	1404	23.9	-40 25	8.1	8.3	A2	6	..	12287b	80	2369	24.3	-24 7	9.5	10.0	A5	5	..	23810b
31	1503	23.9	-42 53	8.7	9.9	G5	3	..	41076b	81	706	24.3	-53 56	8.4	8.6	F5	5	..	41013b
32	1416	23.9	-46 24	9.0	9.8	G5	3	..	38413b	82	701	24.4	+23 22	7.08	7.08	Ao	6	..	38153i
33	511	24.0	+63 57	7.03	7.81	G5	4	..	37556i	83	731	24.4	+19 37	7.15	7.57	F5	5	..	37511i
34	884	24.0	+41 45	8.2	9.0	G5	2	..	38152i	84	635	24.4	+15 57	8.00	9.35	Ma	3	0,1	6674m
35	1012	24.0	+39 55	7.97	8.75	G5	3	..	38152i	85	636	24.4	+15 25	5.70	5.98	Fo	..	0,7	56,77
36	735	24.0	+17 28	8.4	8.4	B9	5	..	37511i	86	689	24.4	+14 6	8.0	8.6	Go	4	..	37511i
37	906	24.0	-12 11	7.9	8.7	G5	4	..	12378b	87	696	24.4	+4 56	7.25	8.60	Mb	5	0,4	37566i
38	1950	24.0	-23 0	6.94	8.3	G5	8	..	23810b	88	915	24.4	-2 38	8.0	9.0	Ko	3	0,1	38063i
39	1867	24.0	-30 59	8.5	9.7	Go	2	..	41080b	89	850	24.4	-4 26	8.1	8.1	Ao	4	2,2	12685b
40	1740	24.0	-33 44	9.1	9.7	F8	2	..	41080b	90	929	24.4	-5 44	9.1	9.4	Fo	2	..	12685b
41	1562	24.0	-44 43	9.5	10.4	F5	2	..	20647b	91	928	24.4	-5 54	8.7	9.2	F8	3	..	12685b
42	1393	24.0	-50 10	9.9	9.8	A2	3	..	44376b	92	892	24.4	-13 53	8.7	9.3	Go	2	..	12378b
43	672	24.0	-56 45	8.6	9.5	G5	2	..	41013b	93	650	24.4	-55 26	8.4	9.8	Ma	3	..	41013b
44	267	24.0	-75 20	9.5	10.5	Ko	2	..	15162b	94	651	24.4	-55 39	8.8	9.8	Go	2	..	41013b
45	809	24.1	+59 39	9.2	9.2	A	2	..	38136i	95	458	24.5	+64 25	8.0	8.6	Go	4	..	37556i
46	779	24.1	+53 42	5.42	5.20	Br	..	4, R	56,77	96	944	24.5	+51 59	8.6	8.6	A	2	E	37406i
47	662	24.1	+27 55	6.64	7.42	G5	6	..	37387i	97	893	24.5	-13 17	5.50	5.33	B3p	..	R	56,78
48	608	24.1	+16 51	10.2	11.0	G5	2	..	6674m	98	1691	24.5	-26 31	8.3	9.4	G5	4	..	17401b
49	618	24.1	+11 57	8.0	8.1	A5	2	..	37511i	99	1429	24.5	-43 35	8.5	9.8	K2	4	..	20647b
50	926	24.1	-10 15	8.5	8.5	Ao	4	..	12685b	100	1418	24.5	-46 49	9.5	10.1	Ko	2	..	38413b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

28500

4^h 24^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	674	24.5	-56 41	8.7	9.5	Fo	3	..	41013b	51	1593	24.9	-37 58	9.5	9.6	Ao	4	..	39655b
2	997	24.6	+43 37	8.7	8.8	A3	2	..	38152i	52	1510	24.9	-42 11	6.38	8.0	Ma	8	..	41076b
3	1013	24.6	+39 48	6.26	6.21	B8	7	..	10405i	53	1339	24.9	-49 13	8.6	9.8	G5	2	..	41001b
4	707	24.6	+14 24	8.9	9.5	Go	2	..	6674m	54	285	24.9	-66 3	8.4	8.7	F2	7	..	20430b
5	590	24.6	+10 1	6.55	7.33	G5	6	E	37566i	55	1016	25.0	+39 41	8.4	8.4	Ao	3	..	10405i
6	700	24.6	+5 4	8.26	8.32	A2	5	3,3	37566i	56	690	25.0	+13 31	5.49	5.77	Fo	10	..	37511i
7	927	24.6	-10 42	9.1	9.9	G5	2	..	12685b	57	920	25.0	-2 34	8.7	8.8	A5	2	..	38063i
8	1842	24.6	-29 59	7.88	8.5	Fo	5	..	41080b	58	870	25.0	-16 10	9.4	10.4	K	1	..	12407b
9	1841	24.6	-30 29	9.2	9.6	A2	2	..	41080b	59	859	25.0	-20 41	8.7	10.1	Ko	2	..	23810b
10	1869	24.6	-31 41	8.1	8.7	F5	4	..	41080b	60	886	25.0	-21 39	8.6	9.2	F8	5	..	23810b
11	1507	24.6	-42 27	10.6	9.9	F8	2	..	41076b	61	838	25.0	-22 44	8.7	8.7	Go	5	..	23810b
12	1352	24.6	-48 45	9.1	9.3	A3	4	..	41001b	62	1905	25.0	-25 50	8.9	10.3	Fo	2	..	17401b
13	1337	24.6	-49 31	10.1	10.7	G5	2	..	44376b	63	1594	25.0	-38 32	9.7	10.7	Go	1	..	39655b
14	524	24.6	-52 47	10.0	10.6	G	1	..	41013b	64	1138	25.0	-51 31	8.6	9.0	Ko	3	..	41001b
15	335	24.6	-65 48	9.6	10.4	G5	3	..	20430b	65	676	25.0	-56 18	9.8	9.8	Ao	3	..	41013b
16	262	24.7	+71 8	8.9	9.0	A2	3	..	38165i	66	141	25.0	-79 45	7.02	6.7	A2	10	..	20538b
17	306	24.7	+70 31	8.6	8.9	F2	3	..	38112i	67	165	25.1	+76 46	8.0	9.0	Ko	6	0,3	6449m
18	905	24.7	+38 30	8.4	9.4	Ko	1	..	38939i	68	640	25.1	+15 55	6.66	7.00	F2	6	..	37511i
19	770	24.7	+0 28	9.2	9.5	F2	4	3,2	12390b	69	710	25.1	+14 59	9.9	10.3	F5	2	..	6674m
20	653	24.7	-1 9	9.6	9.7	A2	4	..	12390b	70	708	25.1	-0 22	9.2	9.8	G	1	..	12390b
21	1903	24.7	-25 25	7.54	9.1	G5	5	..	17401b	71	795	25.1	-3 17	9.2	9.8	Go	3	..	12390b
22	1768	24.7	-37 54	9.5	10.0	F8	3	..	39655b	72	1411	25.1	-40 9	8.5	10.1	Ma	3	5,3 R	20647b
23	1494	24.7	-39 39	8.5	9.2	F8	3	..	39655b	73	1548	25.1	-45 44	8.6	8.9	A2	5	E	41076b
24	273	24.7	-69 13	8.2	9.2	Ko	5	..	20430b	74	708	25.1	-53 38	7.8	8.3	B9	6	..	41013b
25	116	24.7	-80 27	5.62	6.3	Kop	..	R	56,120	75	330	25.1	-62 59	8.67	9.5	G5	4	..	20430b
26	738	24.8	+17 11	8.8	9.8	Ko	3	0,2	6674m	76	87	25.1	-83 51	8.41	8.9	G5	4	..	20557b
27	637	24.8	+15 59	4.84	4.98	A5	..	5,10	56,78	77	718	25.2	+61 40	8.5	8.6	A3	4	..	37556i
28	708	24.8	+14 34	9.2	9.8	Go	3	5,2	6674m	78	811	25.2	+59 16	8.6	8.9	Fo	3	2,3-	38136i
29	918	24.8	-2 42	9.7	10.3	Go	2	..	12390b	79	895	25.2	+55 15	7.61	8.11	F8	4	3,4	37435i
30	852	24.8	-4 12	9.1	9.2	A2	2	..	12685b	80	662	25.2	+24 48	8.2	9.0	G5	2	..	38153i
31	851	24.8	-4 49	8.40	9.40	Ko	3	0,3	10595b	81	702	25.2	+23 8	7.22	8.29	K2	3	..	38153i
32	913	24.8	-14 16	8.3	8.6	Fo	4	..	12378b	82	916	25.2	-14 16	8.9	9.3	F5	1	..	12378b
33	849	24.8	-18 42	8.3	9.3	Ko	4	..	23810b	83	888	25.2	-21 12	9.4	10.4	G5	2	..	23810b
34	1812	24.8	-32 43	8.1	8.2	F2	5	..	41080b	84	1727	25.2	-27 14	9.1	9.4	Fo	4	..	17401b
35	1495	24.8	-39 3	7.98	9.2	G5	4	..	39655b	85	1595	25.2	-37 59	9.1	10.9	Ko	1	..	39655b
36	1425	24.8	-41 29	9.5	9.8	G5	3	..	20647b	86	1430	25.2	-41 23	10.3	9.8	A2	3	..	20647b
37	1509	24.8	-42 21	8.9	9.9	K2	2	..	41076b	87	677	25.2	-56 23	9.8	10.1	Fo	2	..	20264b
38	1431	24.8	-42 59	7.9	8.6	A2	7	..	41076b	88	688	25.3	+63 1	8.9	8.9	Ao	2	..	37556i
39	1430	24.8	-43 20	9.7	10.6	Go	2	..	20647b	89	969	25.3	+44 19	9.2	9.2	Ao	3	..	38152i
40	354	24.8	-62 24	9.0	10.2	K5	3	..	23802b	90	968	25.3	+44 10	9.2	9.2	A	1	..	38152i
41	236	24.9	+73 27	8.7	9.7	Ko	3	..	6449m	91	903	25.3	+36 33	6.72	7.50	G5	5	0,4	10405i
42	686	24.9	+62 28	9.5	10.6	K2	1	..	38907i	92	716	25.3	+29 41	8.4	8.7	F2	4	..	37387i
43	1002	24.9	+48 4	8.1	8.1	Ao	3	..	37406i	93	733	25.3	+19 55	8.4	9.2	G5	2	..	38153i
44	930	24.9	+37 26	8.0	8.5	F8	3	..	38939i	94	641	25.3	+15 34	9.9	10.7	G5	1	..	6674m
45	638	24.9	+15 31	9.4	10.4	Ko	2	..	6674m	95	711	25.3	+14 53	6.64	7.99	Ma	..	0,5	56,78
46	639	24.9	+15 29	5.49	5.63	A5	..	5,8	56,78	96	971	25.4	+44 41	7.82	7.82	Ao	4	..	38152i
47	707	24.9	-0 22	9.2	9.2	Ao	2	..	12390b	97	979	25.4	+40 36	8.6	8.9	Fo	2	..	38152i
48	798	24.9	-15 15	9.2	9.2	Ao	3	..	12378b	98	1971	25.4	-23 16	9.2	8.7	F5	4	..	23810b
49	1750	24.9	-33 39	8.8	9.6	G5	2	..	41080b	99	1697	25.4	-26 30	6.91	9.1	Ko	6	..	17401b
50	1772	24.9	-37 50	7.95	8.3	G5	6	..	39655b	100	1818	25.4	-32 22	9.5	9.1	Ao	3	..	41080b

THE HENRY DRAPER CATALOGUE.

28600

4^h 25^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	679	25.4	-56 8	8.7	9.5	F5	3	..	41013b	51	828	25.9	-6 55	9.4	10.4	K	1	..	12685b
2	275	25.4	-69 37	8.9	9.2	F2	5	..	2043ob	52	829	25.9	-7 28	8.5	8.6	A2	5	0,4	10595b
3	897	25.5	+55 37	9.0	9.0	Ao	2	..	38981i	53	897	25.9	-13 29	8.5	9.3	G5	2	..	12378b
4	843	25.5	+52 35	7.59	8.77	K5	2	..	37406i	54	1978	25.9	-23 45	9.2	9.2	Ko	3	..	2381ob
5	741	25.5	+17 20	9.9	11.0	K2	3	..	6674m	55	1569	25.9	-28 39	9.5	9.8	F2	2	..	17401b
6	612	25.5	+17 2	9.6	9.7	A3	2	..	6674m	56	1749	25.9	-36 47	9.5	10.0	F5	2	..	4108ob
7	712	25.5	+14 29	8.07	8.49	F5	3	..	37511i	57	1599	25.9	-38 54	8.1	8.9	G5	4	..	39655b
8	588	25.5	+10 32	7.12	7.54	F5	5	E	37511i	58	1395	25.9	-47 5	9.7	10.7	K2	1	..	44376b
9	656	25.5	-1 3	9.9	9.9	A	2	..	1239ob	59	1356	25.9	-48 39	10.1	10.2	G5	1	..	44376b
10	891	25.5	-11 47	8.2	8.6	F5	3	..	8862b	60	346	25.9	-59 36	9.9	10.0	A3	3	..	20264b
11	1597	25.5	-38 21	8.9	9.5	F5	3	..	39655b	61	186	26.0	+75 34	10.2	11.0	G5	1	..	6449m
12	337	25.5	-64 15	9.7	10.1	F5	4	..	2043ob	62	656	26.0	+21 25	9.8	9.9	A2	2	..	38153i
13	166	25.6	+76 33	8.9	9.0	A3	6	..	6449m	63	715	26.0	+14 28	9.2	9.5	F2	2	..	6674m
14	168	25.6	+76 14	9.02	10.37	Mb	2	..	6449m	64	898	26.0	-13 8	8.5	9.5	Ko	1	..	12378b
15	237	25.6	+73 56	8.6	8.9	Fo	5	0,2	6449m	65	1748	26.0	-29 6	7.50	8.2	Fo	7	..	4108ob
16	460	25.6	+64 17	8.0	8.0	Ao	4	..	37556i	66	1520	26.0	-42 25	7.7	8.3	A3	6	..	41076b
17	937	25.6	+56 30	8.6	8.6	Ao	4	E	37435i	67	332	26.0	-63 2	6.90	6.9	Ao	8	..	15186b
18	1013	25.6	+50 50	8.31	8.81	F8	4	..	37406i	68	340	26.0	-65 49	9.4	10.2	G5	2	..	2043ob
19	907	25.6	+38 35	8.0	8.4	F5	2	..	38939i	69	143	26.0	-79 29	8.9	9.3	F5	3	..	15162b
20	907	25.6	+36 50	6.82	7.24	F5	5	0,4	10405i	70	..	26.1	+74 41	..	..	A	2	..	6449m
21	707	25.6	+22 37	7.8	7.8	Ao	6	..	37589i	71	614	26.1	+16 59	9.6	9.6	Ao	4	3,2	6674m
22	643	25.6	+15 35	7.67	8.01	F2	4	..	37511i	72	941	26.1	-5 11	8.05	8.11	A2	3	..	17408b
23	710	25.6	-0 6	8.33	8.39	A2	3	..	37593i	73	877	26.1	-16 30	9.4	10.5	K2	2	..	12407b
24	923	25.6	-2 27	8.5	9.3	G5	4	5,2	37593i	74	669	26.1	-54 16	8.5	9.0	G5	3	..	41013b
25	896	25.6	-13 49	6.37	7.15	G5	4	0,8	8862b	75	848	26.2	+52 48	9.2	9.6	F5	3	..	37406i
26	1567	25.6	-28 36	8.7	9.8	K2	3	..	17401b	76	657	26.2	+21 25	8.0	8.4	F5	5	E	37589i
27	1515	25.6	-42 14	9.5	9.8	F2	2	..	41076b	77	645	26.2	+15 38	6.04	6.32	Fo	..	0,7	56,78
28	167	25.7	+76 45	8.7	8.8	A2	7	0,3	6449m	78	704	26.2	+4 22	8.8	9.8	Ko	2	2,2	38083i
29	656	25.7	+7 6	7.85	7.93	A3	4	E	37566i	79	659	26.2	-1 3	8.8	9.8	Ko	2	..	1239ob
30	696	25.7	+6 34	6.94	7.72	G5	6	E	37566i	80	878	26.2	-16 40	8.9	9.7	G5	4	..	12407b
31	612	25.7	+3 16	8.8	9.4	Go	3	..	4618ob	81	894	26.2	-21 7	8.6	9.5	F8	4	..	2381ob
32	933	25.7	-10 8	8.9	9.9	Ko	2	..	12685b	82	1980	26.2	-23 43	8.9	8.5	F2	4	..	2381ob
33	317	25.7	-67 48	9.1	9.9	G5	3	..	2043ob	83	1751	26.2	-29 28	9.2	9.9	Ko	1	..	4108ob
34	744	25.8	+17 29	10.6	11.7	K2	2	..	6674m	84	1855	26.2	-30 11	8.9	9.3	A5	3	..	17401b
35	691	25.8	+13 41	7.8	8.3	F8	4	..	37511i	85	1853	26.2	-30 29	8.9	9.7	K2	1	..	4108ob
36	892	25.8	-17 5	8.7	9.7	Ko	2	..	12407b	86	1758	26.2	-33 46	8.5	10.2	K5	2	..	4108ob
37	853	25.8	-18 0	8.8	9.6	G5	2	..	12407b	87	1504	26.2	-39 19	7.30	7.9	A3	7	E	39655b
38	892	25.8	-21 4	9.1	9.8	F8	3	..	2381ob	88	1523	26.2	-42 46	9.0	9.2	Ko	3	..	41076b
39	1746	25.8	-29 15	7.7	8.7	Ko	4	..	4108ob	89	1350	26.2	-49 49	7.84	8.2	Go	8	..	41001b
40	1753	25.8	-35 31	9.7	10.0	Go	3	..	4108ob	90	681	26.2	-56 15	9.6	10.4	G5	1	..	20264b
41	1435	25.8	-41 12	9.5	9.8	G5	4	..	20647b	91	338	26.2	-64 22	9.5	10.1	Go	3	..	2043ob
42	1516	25.8	-42 0	9.3	10.7	K2	1	..	20647b	92	849	26.3	+52 28	9.2	9.2	A	2	..	37406i
43	339	25.8	-61 56	9.1	9.6	Go	4	..	23802b	93	989	26.3	+42 49	6.80	7.08	Fo	5	..	38088i
44	339	25.8	-65 53	8.8	9.8	Ko	5	..	2043ob	94	910	26.3	+36 32	8.7	9.8	K2	1	..	38939i
45	895	25.9	+46 28	8.9	9.7	G5	1	..	38125i	95	810	26.3	+32 31	8.4	8.9	F8	3	..	37387i
46	973	25.9	+44 43	7.92	9.10	K5	2	..	38152i	96	790	26.3	+31 11	8.2	8.2	Ao	3	..	37387i
47	879	25.9	+36 1	8.5	9.1	Go	1	..	38939i	97	663	26.3	+24 58	7.31	7.37	A2	7	..	38153i
48	692	25.9	+13 9	8.2	8.2	Ao	2	..	37511i	98	942	26.3	-5 5	8.00	8.42	F5	3	..	17408b
49	658	25.9	+7 15	7.80	8.58	G5	3	..	38083i	99	1572	26.3	-27 58	9.9	10.3	Go	2	..	17401b
50	726	25.9	+2 42	8.4	9.4	Ko	2	..	4618ob	100	1427	26.3	-46 44	6.20	7.1	G5	9	..	41001b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

28700

4^h 26^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	300	m. 26.3	° -70 13	7.92	8.6	G5	7	..	2043ob	51	946	m. 26.8	° -19 42	8.7	9.8	F5	3	..	2381ob
2	263	26.4	+71 41	8.2	8.3	A2	5	..	3763oi	52	1987	26.8	-23 43	10.4	10.1	F8	2	..	2381ob
3	264	26.4	+71 16	8.8	8.9	A2	2	..	3763oi	53	1919	26.8	-25 12	8.2	9.8	Ko	3	..	17401b
4	990	26.4	+42 51	6.07	6.35	Fo	6	R	38088i	54	1709	26.8	-25 59	9.1	10.0	Ko	3	..	17401b
5	764	26.4	+1 57	9.2	10.4	K5	2	..	4618ob	55	1606	26.8	-38 30	7.17	8.3	G5	6	..	39655b
6	763	26.4	+1 50	10.6	11.8	K5	1	..	4618ob	56	1509	26.8	-39 13	7.20	8.6	Ko	5	..	12287b
7	895	26.4	-21 36	7.6	7.8	A3	8	..	2381ob	57	1528	26.8	-42 5	9.7	9.8	F5	2	..	20647b
8	1983	26.4	-23 15	7.04	7.2	A2	10	..	2381ob	58	360	26.8	-61 58	8.28	9.4	Ko	7	2,4-	23802b
9	1781	26.4	-37 15	10.1	10.0	Ao	2	..	39655b	59	359	26.8	-62 25	9.4	10.5	K2	3	E	23802b
10	1506	26.4	-39 39	7.7	9.2	G5	3	..	39655b	60	265	26.9	+71 16	8.0	8.1	A2	6	..	3763oi
11	1397	26.4	-47 0	10.6	11.0	F8	1	..	44376b	61	758	26.9	+58 24	9.2	9.6	F5	2	..	38136i
12	117	26.4	-80 21	8.6	9.0	F5	3	..	20538b	62	747	26.9	+17 38	9.2	9.7	F8	1	..	37511i
13	882	26.5	+35 37	8.6	9.6	Ko	1	..	38939i	63	904	26.9	-13 52	6.11	6.17	A2	7	..	8862b
14	791	26.5	+31 34	8.6	8.6	B9	4	..	37387i	64	867	26.9	-20 54	9.9	10.1	A	2	R	2381ob
15	671	26.5	+5 33	6.66	6.64	B9	7	..	38083i	65	1714	26.9	-26 13	8.7	9.2	F2	6	..	17401b
16	614	26.5	+3 7	8.6	9.4	G5	2	..	15135b	66	1440	26.9	-41 53	7.66	8.9	K5	4	..	12287b
17	896	26.5	-17 7	8.5	9.5	Ko	5	..	12407b	67	1448	26.9	-43 47	9.1	10.7	K2	2	..	20647b
18	857	26.5	-18 10	9.4	10.0	Go	2	..	12407b	68	1363	26.9	-48 36	8.7	10.2	K5	1	..	41001b
19	896	26.5	-21 3	7.9	8.3	Ao	7	..	2381ob	69	290	26.9	-74 44	9.1	9.7	Go	3	..	15162b
20	1857	26.5	-30 40	7.18	7.6	Ao	7	..	4108ob	70	170	27.0	+76 46	9.9	9.9	Ao	4	..	6449m
21	1147	26.5	-51 21	9.2	9.8	Ko	2	..	41001b	71	1016	27.0	+50 47	7.84	8.12	Fo	5	..	37406i
22	264	26.5	-71 31	10.1	10.1	Ao	2	E	2043ob	72	956	27.0	+45 43	7.22	7.64	F5	5	..	37406i
23	210	26.6	+74 16	7.8	8.8	Ko	5	0,2	6449m	73	729	27.0	+2 23	9.9	10.0	A3	4	3,2	15135b
24	616	26.6	+16 22	9.9	10.3	F5	2	..	6674m	74	929	27.0	-2 8	9.2	10.3	K2	2	..	1239ob
25	672	26.6	+5 52	9.2	9.2	Ao	3	..	15135b	75	861	27.0	-4 36	7.95	8.95	Ko	4	..	12685b
26	712	26.6	-0 54	8.6	9.8	K5	1	..	1239ob	76	1768	27.0	-35 53	5.92	6.5	Ko	..	..	56,120
27	901	26.6	-13 34	9.1	9.6	F8	1	..	12378b	77	671	27.0	-54 38	8.9	9.6	Ko	2	..	41013b
28	1985	26.6	-23 38	8.3	9.2	K2	4	..	2381ob	78	268	27.0	-75 50	8.0	8.8	G5	6	..	15162b
29	1425	26.6	-40 37	9.1	9.2	Fo	4	0,2	20647b	79	339	27.1	+68 5	7.37	7.32	B8	5	2,7	37556i
30	1352	26.6	-49 20	10.1	10.4	F8	2	..	44376b	80	515	27.1	+64 3	5.91	5.91	Ao	7	..	37556i
31	358	26.6	-62 2	8.9	9.4	F8	5	3,2	23802b	81	982	27.1	+44 48	8.47	9.25	G5	2	..	38152i
32	357	26.6	-62 45	5.78	6.6	Ko	..	..	56,120	82	993	27.1	+42 52	7.7	7.8	A5	4	..	38088i
33	338	26.7	+67 8	9.2	10.2	Ko	1	..	38165i	83	646	27.1	+15 48	8.8	9.8	Ko	3	5,1	6674m
34	817	26.7	+57 13	6.70	6.98	Fo	6	0,8	37426i	84	765	27.1	+1 19	9.2	10.3	K2	2	2,1	1239ob
35	592	26.7	+10 33	7.9	9.0	K2	3	E	37511i	85	663	27.1	-1 45	8.17	8.23	A2	3	3,2	37593i
36	674	26.7	+5 11	6.43	6.77	F2	6	..	38083i	86	930	27.1	-2 11	8.9	9.5	Go	2	..	38063i
37	660	26.7	-1 34	7.8	8.6	G5	2	E	37593i	87	1994	27.1	-23 35	11.4	10.4	F	2	..	2381ob
38	1754	26.7	-29 31	9.2	9.7	G5	1	..	4108ob	88	1786	27.1	-36 57	9.5	10.1	Go	2	..	4108ob
39	1830	26.7	-32 33	9.1	9.7	Ko	3	..	4108ob	89	1428	27.1	-40 26	9.4	10.1	G5	2	..	20647b
40	1782	26.7	-37 14	9.1	10.9	K2	2	..	39655b	90	261	27.1	-73 33	8.9	9.5	Go	2	..	2054ob
41	1605	26.7	-38 15	9.7	9.5	G5	2	..	39655b	91	146	27.2	+80 39	7.87	8.65	G5	4	..	37558i
42	1525	26.7	-42 21	9.5	9.5	Fo	3	..	20647b	92	149	27.2	+79 34	8.6	8.9	F2	3	..	37558i
43	1559	26.7	-45 18	9.0	9.8	F5	3	..	41076b	93	812	27.2	+59 12	6.65	6.65	Ao	7	0,9	38136i
44	339	26.7	-64 1	9.1	9.5	F5	4	..	2043ob	94	1204	27.2	+49 54	7.07	7.07	Ao	7	..	37406i
45	169	26.8	+76 20	7.62	8.12	F8	4	3,8	37558i	95	735	27.2	+19 8	7.49	8.49	Ko	4	5,4	38153i
46	1202	26.8	+49 43	9.2	10.0	G5	1	..	38125i	96	780	27.2	+0 46	7.8	7.8	B8	6	..	37593i
47	955	26.8	+45 26	7.72	7.70	B9	4	..	38152i	97	1578	27.2	-28 4	8.7	10.3	G5	3	..	17401b
48	675	26.8	+5 24	8.4	8.9	F8	3	..	15135b	98	1431	27.2	-40 37	7.7	8.6	Go	6	0,4-	20647b
49	713	26.8	-0 16	4.97	5.97	Ko	..	0,9	56,78	99	1562	27.2	-45 19	9.3	9.5	F5	4	..	20647b
50	937	26.8	-10 20	9.4	9.4	Ao	3	..	12685b	100	1407	27.2	-50 45	10.3	10.4	Fo	3	..	44376b

THE HENRY DRAPER CATALOGUE.

28800

4^h 27^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	690	27.3	+62 40	7.82	7.88	A2	3	..	37556i	51	1516	27.6	-39 25	9.1	9.5	Go	3	E	39655b
2	1206	27.3	+49 24	8.7	9.7	Ko	2	..	38125i	52	1433	27.6	-40 5	9.10	9.5	Go	3	5,2	20647b
3	995	27.3	+42 28	8.5	8.5	Ao	3	..	38088i	53	1154	27.6	-51 8	9.7	10.1	Fo	2	..	44376b
4	794	27.3	+31 28	8.4	8.4	Ao	4	..	37387i	54	674	27.6	-54 9	7.8	8.7	G5	4	..	41013b
5	647	27.3	+15 36	8.5	9.3	G5	4	0,1	6674m	55	685	27.7	+31 0	8.4	9.5	K2	2	..	37387i
6	781	27.3	+0 54	9.6	10.2	Go	2	..	12390b	56	910	27.7	-13 48	9.4	9.4	Ao	3	..	12407b
7	915	27.3	-12 51	7.04	7.46	F5	5	0,4	12378b	57	922	27.7	-14 39	9.7	9.7	A	1	..	12407b
8	900	27.3	-21 13	8.7	9.6	Go	3	..	23810b	58	900	27.7	-17 46	8.8	8.8	Ao	4	..	12407b
9	1995	27.3	-23 17	9.9	9.8	G5	2	..	23810b	59	904	27.7	-20 55	7.04	8.9	K5	6	..	23810b
10	1788	27.3	-37 6	7.24	8.6	Ko	5	..	41080b	60	1931	27.7	-24 59	9.45	10.7	G5	2	..	17401b
11	1454	27.3	-43 3	9.2	10.2	Fo	1	..	20647b	61	1890	27.7	-31 55	8.1	9.0	F2	3	..	41080b
12	1452	27.3	-43 26	6.9	7.8	B9	9	..	41076b	62	1791	27.7	-37 48	8.5	9.9	G5	4	..	39655b
13	1453	27.3	-43 38	7.2	7.8	B9	8	..	41076b	63	1456	27.7	-43 25	9.7	9.5	Ao	6	..	20647b
14	1408	27.3	-50 50	9.7	10.1	F5	3	..	44376b	64	1410	27.7	-50 14	10.3	10.6	F5	2	..	44376b
15	303	27.3	-70 36	9.1	10.1	Ko	3	E	20430b	65	266	27.7	-68 13	9.1	9.2	A2	5	..	20430b
16	336	27.4	+68 21	8.5	8.5	B8	3	E	38112i	66	665	27.8	+24 18	9.0	9.5	F8	1	..	38153i
17	340	27.4	+67 57	9.0	9.6	Go	2	..	38165i	67	750	27.8	+17 48	6.24	6.19	B8	8	..	37511i
18	1008	27.4	+43 46	8.7	8.7	Ao	2	..	38152i	68	648	27.8	+15 45	9.4	9.4	B8	3	R	6674m
19	705	27.4	+24 4	8.0	8.3	Fo	5	..	38153i	69	1893	27.8	-31 44	7.57	8.2	F2	5	..	41080b
20	660	27.4	+21 27	9.4	10.6	K5	1	..	38153i	70	1838	27.8	-32 37	9.7	9.9	Ko	1	..	41080b
21	948	27.4	-5 15	8.1	8.7	Go	7	..	12685b	71	1837	27.8	-32 45	8.1	8.1	Fo	7	..	41080b
22	921	27.4	-9 49	9.31	9.73	F5	1	..	12685b	72	1450	27.8	-41 57	10.1	10.1	Go	2	..	20647b
23	1760	27.4	-29 6	7.44	8.1	Fo	7	..	41080b	73	1567	27.8	-45 10	5.16	4.99	B3	..	0, R	28,197
24	1445	27.4	-41 42	8.2	9.5	K2	4	3,1	20647b	74	1569	27.8	-45 49	8.0	9.8	K5	3	E	41076b
25	1367	27.4	-48 12	7.7	8.3	Ao	7	..	41001b	75	1436	27.8	-46 45	9.2	10.6	K5	2	..	44376b
26	711	27.4	-53 12	7.7	8.3	F2	7	..	41013b	76	657	27.8	-55 44	9.1	10.4	G5	1	..	41013b
27	664	27.4	-57 25	8.1	8.7	Ko	4	0,4	42691b	77	901	27.9	+55 18	7.26	7.76	F8	6	..	37426i
28	720	27.5	+61 10	7.22	8.29	K2	5	0,5	38136i	78	620	27.9	+16 32	9.2	10.0	G5	1	..	6674m
29	813	27.5	+59 6	8.6	9.6	Ko	2	..	38136i	79	621	27.9	+16 7	6.51	6.79	Fo	7	..	37511i
30	941	27.5	+57 4	8.6	9.7	K2	1	..	38981i	80	708	27.9	+4 45	8.4	8.9	Go	2	2,2	15135b
31	1008	27.5	+47 48	8.8	9.4	G	1	..	38125i	81	716	27.9	-0 23	8.4	8.5	A2	7	..	12390b
32	891	27.5	+34 36	8.30	8.30	Ao	4	2,3	37387i	82	902	27.9	-17 29	8.3	9.3	Ko	7	..	12407b
33	880	27.5	+33 34	8.0	8.1	A3	3	..	37387i	83	1731	27.9	-34 0	10.1	10.7	Go	2	..	41080b
34	943	27.5	-10 8	8.7	9.1	F5	3	..	12685b	84	1760	27.9	-36 8	8.1	8.0	Fo	5	..	41080b
35	902	27.5	-21 26	8.3	10.1	K2	2	..	23810b	85	1451	27.9	-41 10	9.5	9.5	A5	5	..	20647b
36	1755	27.5	-36 28	8.2	10.7	Ma	2	..	41080b	86	1596	27.9	-44 29	8.6	9.0	A2	4	E	41076b
37	1447	27.5	-41 24	7.08	7.5	Fo	8	..	12287b	87	344	27.9	-65 56	8.9	9.3	F5	7	..	20430b
38	265	27.5	-70 59	9.3	9.9	Go	3	E	20430b	88	649	28.0	+15 45	8.8	9.6	G5	5	..	6674m
39	269	27.5	-75 55	8.1	8.9	G5	6	..	15162b	89	717	28.0	-0 16	8.8	9.9	K2	2	..	12390b
40	230	27.6	+72 22	9.2	9.6	F5	2	..	38165i	90	929	28.0	-5 56	9.4	9.7	F2	2	..	12685b
41	796	27.6	+32 1	8.6	9.2	G	1	..	38939i	91	931	28.0	-6 32	9.1	9.5	F5	3	..	12685b
42	795	27.6	+31 56	8.6	9.2	G	2	..	38939i	92	861	28.0	-17 57	8.7	9.9	K5	4	..	12407b
43	809	27.6	-3 25	5.91	5.89	B9	9	..	17408b	93	870	28.0	-20 4	9.4	10.1	A3	2	..	23810b
44	903	27.6	-21 37	9.2	10.4	Ko	1	..	23810b	94	1895	28.0	-31 8	8.2	9.7	Go	2	..	41080b
45	2401	27.6	-24 20	7.94	8.8	A2	9	..	23810b	95	1521	28.0	-39 48	9.7	10.7	Ko	1	..	39655b
46	2403	27.6	-24 47	9.48	10.3	Go	2	..	17401b	96	1437	28.0	-46 13	9.3	9.8	Go	3	..	44376b
47	1866	27.6	-30 0	8.23	9.0	K2	4	..	41080b	97	714	28.0	-53 41	8.5	9.5	Ko	2	..	41013b
48	1777	27.6	-33 7	9.5	9.9	A	2	..	41080b	98	304	28.0	-69 59	9.02	9.8	K2	3	..	20430b
49	1756	27.6	-36 0	7.24	8.7	Ko	4	..	41080b	99	137	28.0	-78 57	8.6	9.0	F5	4	..	15162b
50	1517	27.6	-38 59	8.5	9.6	Ko	4	0,3	39655b	100	807	28.1	-15 23	9.7	10.3	Go	1	..	12378b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

28900

4^h 28^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1770	28.1	-29 1	7.19	8.4	K5	5	..	41080b	51	468	28.6	+64 40	8.6	8.9	F2	3	..	37556i
2	1615	28.1	-38 31	10.1	9.9	Go	2	..	39655b	52	907	28.6	+41 28	8.4	9.2	G5	1	..	38152i
3	1536	28.1	-42 40	9.1	9.6	Go	2	..	20647b	53	710	28.6	+22 30	9.5	10.1	Go	2	..	38153i
4	1571	28.1	-45 35	8.3	8.7	Go	7	..	20647b	54	703	28.6	+7 4	7.8	7.9	A3	2	..	38083i
5	1439	28.1	-46 46	9.2	10.1	Ko	2	5,2	44376b	55	617	28.6	+3 14	8.9	9.0	A3	2	..	46180b
6	270	28.1	-75 6	9.4	10.0	Go	3	..	15162b	56	768	28.6	+1 36	9.4	10.2	G5	3	5,1	15135b
7	782	28.2	+54 48	8.6	9.4	G5	2	..	38981i	57	787	28.6	+0 8	8.98	9.06	A3	3	..	12390b
8	1019	28.2	+50 24	9.0	9.6	Go	2	..	38125i	58	938	28.6	-2 2	7.7	8.7	Ko	4	..	38063i
9	1111	28.2	+48 35	8.6	8.6	Ao	3	..	37406i	59	865	28.6	-4 11	8.1	9.1	Ko	3	..	12685b
10	720	28.2	+14 38	4.75	4.89	A5	..	5,R	56,78	60	864	28.6	-4 16	9.1	10.1	Ko	1	..	12685b
11	608	28.2	+13 2	6.66	7.00	F2	6	..	37511i	61	837	28.6	-7 12	6.76	7.83	K2	4	..	17408b
12	923	28.2	-14 2	9.4	10.0	G	1	..	12407b	62	899	28.6	-11 2	8.9	9.4	F8	4	..	12685b
13	1736	28.2	-34 7	8.0	7.8	B9	6	..	41080b	63	1619	28.6	-38 11	10.5	9.9	Go	1	..	39655b
14	1597	28.2	-44 23	9.3	9.8	F8	3	..	44376b	64	321	28.6	-67 10	9.6	10.1	F8	2	..	20430b
15	342	28.2	-64 47	8.60	9.9	Ma	4	..	20430b	65	941	28.7	+37 17	8.13	9.20	K2	2	..	38937i
16	347	28.2	-65 7	9.2	9.8	Go	4	..	20430b	66	776	28.7	+20 54	8.6	9.2	Go	3	..	38153i
17	89	28.2	-83 1	9.5	10.1	G	1	..	20557b	67	769	28.7	+1 28	9.4	9.5	A5	2	..	12390b
18	172	28.3	+76 18	9.5	9.6	A2	3	..	6449m	68	939	28.7	-2 40	9.2	10.2	Ko	2	..	12390b
19	822	28.3	+57 8	8.8	9.6	G5	4	..	38981i	69	879	28.7	-8 3	8.3	8.8	F8	4	2,5	12685b
20	854	28.3	+52 40	9.2	9.2	A	2	..	37406i	70	900	28.7	-11 0	6.24	7.24	Ko	8	..	12685b
21	622	28.3	+16 32	9.2	9.2	Ao	2	..	6674m	71	907	28.7	-21 22	9.1	10.1	Ko	2	..	23810b
22	595	28.3	+10 19	7.86	7.86	Ao	4	E	38083i	72	390	28.7	-58 24	9.2	10.2	A3	2	..	20264b
23	878	28.3	-8 48	9.4	10.0	Go	2	..	12685b	73	816	28.8	+59 53	7.46	7.46	Ao	7	0,5	38981i
24	692	28.4	+62 46	8.6	8.9	F2	4	2,2 R	38907i	74	917	28.8	+38 16	8.6	8.7	A2	2	..	38939i
25	944	28.4	+56 14	9.2	9.2	Ao	2	..	38981i	75	710	28.8	+24 2	9.0	9.0	A	1	..	38153i
26	855	28.4	+52 40	7.9	8.7	G5	2	..	37406i	76	712	28.8	+22 28	6.81	7.15	F2	6	..	38153i
27	915	28.4	+38 41	8.1	8.1	Ao	4	..	37260i	77	650	28.8	+15 37	9.4	10.4	Ko	2	..	6674m
28	686	28.4	+30 26	9.1	9.4	Fo	2	..	37387i	78	679	28.8	+5 21	5.78	5.78	Ao	10	..	38083i
29	666	28.4	+28 46	5.70	5.68	B9	10	..	37387i	79	953	28.8	-5 31	6.83	7.83	Ko	7	..	12685b
30	600	28.4	+9 12	6.20	7.20	Ko	..	0,7	56,78	80	884	28.8	-8 28	6.70	6.70	Ao	5	..	2298b
31	709	28.4	+4 51	9.2	10.0	G5	2	..	15135b	81	954	28.8	-19 34	7.99	8.6	F5	6	..	23810b
32	785	28.4	+0 49	8.4	9.2	G5	2	E	37593i	82	2415	28.8	-24 13	9.5	10.3	Go	3	..	23810b
33	811	28.4	-3 13	8.9	10.0	K2	2	..	12390b	83	1593	28.8	-28 42	9.5	10.3	Go	1	..	17401b
34	922	28.4	-12 21	8.9	9.2	F2	2	..	12378b	84	1594	28.8	-28 51	9.4	10.6	G5	1	..	17401b
35	890	28.4	-15 59	8.7	8.8	A3	5	..	12378b	85	150	28.9	+79 27	6.57	6.57	Ao	9	..	37558i
36	1941	28.4	-25 25	7.90	8.8	A5	6	2,7	17401b	86	1013	28.9	+47 10	7.52	8.02	F5	6	R	37406i
37	1875	28.4	-30 20	8.5	9.6	K2	2	..	41080b	87	1012	28.9	+47 9	7.55	7.83	F	6	..	37406i
38	343	28.4	-64 14	8.9	10.1	K5	2	..	20430b	88	1003	28.9	+42 38	8.0	8.8	G5	2	..	38088i
39	304	28.4	-72 51	7.4	8.2	G5	6	..	15162b	89	1030	28.9	+39 32	8.0	8.4	F5	4	..	37260i
40	90	28.4	-83 14	8.3	8.6	F2	7	..	20538b	90	778	28.9	+20 55	8.4	8.9	F8	7	..	38153i
41	147	28.5	+80 21	7.83	8.83	Ko	3	..	37558i	91	751	28.9	+17 32	7.8	8.1	F2	4	..	37511i
42	856	28.5	+52 18	8.5	8.5	Ao	3	..	37426i	92	651	28.9	+15 17	8.4	8.9	F8	4	..	37511i
43	991	28.5	+45 1	7.72	8.90	K5	2	..	38088i	93	667	28.9	+7 59	8.2	8.3	A2	4	..	38083i
44	709	28.5	+22 54	9.8	10.4	G	1	..	38153i	94	908	28.9	-21 6	9.1	10.1	G5	2	..	23810b
45	664	28.5	+21 23	10.7	11.1	F5	2	..	38153i	95	910	28.9	-21 20	9.4	10.1	Go	2	..	23810b
46	678	28.5	+5 11	7.91	8.91	Ko	4	5,3	38083i	96	2007	28.9	-23 33	10.9	10.1	G	2	..	23810b
47	923	28.5	-12 45	6.69	7.69	Ko	5	0,3	12378b	97	1731	28.9	-26 27	8.9	10.0	Ko	2	..	17401b
48	952	28.5	-19 49	9.28	9.5	F5	3	..	23810b	98	1765	28.9	-36 34	8.8	10.6	Go	1	..	41080b
49	291	28.5	-74 56	9.58	9.5	Fo	2	..	46167b	99	1415	28.9	-50 53	9.7	10.1	Go	4	..	44376b
50	467	28.6	+65 4	8.95	8.95	Ao	2	..	38907i	100	419	29.0	+65 34	9.5	10.0	F8	2	..	38907i

THE HENRY DRAPER CATALOGUE.

29000

4^h 29^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	903	29.0	+55 46	9.5	10.3	G5	1	..	3898ri	51	625	29.3	+16 59	7.12	8.30	K5	4	5.5	37511i
2	1115	29.0	+49 2	8.4	8.7	F2	3	..	37406i	52	789	29.3	+0 13	7.48	8.26	G5	5	..	37593i
3	752	29.0	+17 14	9.6	10.0	F5	3	R	6674m	53	2419	29.3	-24 9	8.9	9.4	A3	7	..	23810b
4	602	29.0	+9 48	8.4	9.2	G5	4	E	38083i	54	1791	29.3	-35 55	8.1	8.9	G5	5	..	41080b
5	619	29.0	+3 33	7.8	8.8	Ko	3	..	38063i	55	1460	29.3	-41 38	9.1	10.4	Ko	2	..	20647b
6	818	29.0	-3 17	9.4	9.4	Ao	3	..	12390b	56	1545	29.3	-42 43	9.2	9.9	Go	2	..	20647b
7	934	29.0	-6 27	9.4	9.5	A3	3	..	12685b	57	322	29.3	-66 57	9.8	10.4	Go	1	..	20430b
8	935	29.0	-6 43	9.4	9.8	F5	2	..	12390b	58	172	29.3	-77 55	7.1	7.6	F8	8	..	15162b
9	838	29.0	-6 57	5.66	5.64	B9	8	..	2298b	59	340	29.4	+68 55	8.2	8.2	Ao	5	..	38112i
10	872	29.0	-19 58	9.28	9.8	Fo	4	..	23810b	60	826	29.4	+60 41	6.77	7.77	Ko	4	2.5	37556i
11	911	29.0	-21 35	8.8	10.1	Go	2	..	23810b	61	668	29.4	+7 15	8.2	8.2	Ao	4	..	38083i
12	2416	29.0	-24 14	9.7	10.6	K2	2	..	23810b	62	956	29.4	-4 58	9.45	9.53	A3	2	..	12390b
13	1946	29.0	-25 46	7.36	7.8	F2	8	..	17401b	63	841	29.4	-7 2	6.42	7.49	K2	4	..	17408b
14	1580	29.0	-45 20	9.7	10.7	K2	1	..	44376b	64	887	29.4	-8 27	5.45	6.80	Ma	6	0.4 R	17408b
15	667	29.0	-57 40	8.2	8.9	F8	4	..	42691b	65	930	29.4	-9 11	5.50	6.57	K2	5	2.9	2298b
16	391	29.0	-58 51	9.1	10.3	Ko	1	..	20264b	66	1448	29.4	-40 25	10.5	10.1	Go	2	..	20647b
17	345	29.0	-64 57	9.8	10.1	Fo	3	..	20430b	67	393	29.4	-58 42	8.9	9.9	Ko	2	..	20264b
18	339	29.1	+68 53	8.6	9.8	K5	1	..	38112i	68	753	29.5	+18 3	9.6	10.4	G5	2	..	6674m
19	335	29.1	+67 1	8.0	8.0	Ao	5	2.4	38112i	69	754	29.5	+17 34	10.6	11.8	K5	1	..	6674m
20	520	29.1	+63 9	9.2	9.6	F5	3	3.2	38907i	70	711	29.5	+4 52	9.30	9.72	F5	2	..	15135b
21	825	29.1	+60 28	7.86	8.64	G5	4	5.4	38136i	71	671	29.5	-1 10	8.4	9.4	Ko	1	..	12390b
22	814	29.1	+33 4	7.6	7.7	A2	4	..	37387i	72	957	29.5	-5 20	8.1	9.2	K2	3	..	12685b
23	652	29.1	+18 13	7.6	7.6	Ao	6	2.4	6674m	73	869	29.5	-18 24	7.7	8.3	Go	7	..	23810b
24	937	29.1	-6 25	8.9	9.9	Ko	2	..	12685b	74	956	29.5	-19 23	8.7	9.6	Ko	4	..	23810b
25	927	29.1	-12 43	9.4	9.8	F5	1	..	12378b	75	1857	29.5	-32 15	9.4	9.0	Fo	2	..	41080b
26	2008	29.1	-23 48	9.9	9.5	F2	4	..	23810b	76	1466	29.5	-43 39	7.9	9.8	K5	4	5.2	20647b
27	1851	29.1	-32 46	10.5	9.9	A	1	..	41080b	77	1384	29.5	-48 0	9.2	10.6	Ko	2	E	38400b
28	1787	29.1	-33 19	8.0	7.8	B9	5	..	41080b	78	1419	29.5	-50 10	7.9	8.9	Fo	6	..	41001b
29	1366	29.1	-49 33	8.7	9.5	Go	2	..	41001b	79	277	29.5	-69 50	8.42	8.6	Fo	5	..	20430b
30	685	29.1	-56 8	9.0	9.8	Ao	3	..	41013b	80	1015	29.6	+47 33	8.9	9.5	G	1	..	38125i
31	362	29.1	-62 26	10.1	11.1	K	2	E	23802b	81	712	29.6	+4 48	9.2	10.0	G5	2	..	15135b
32	349	29.1	-65 36	8.4	8.4	Ao	8	..	20430b	82	942	29.6	-2 17	8.2	8.2	Ao	4	0.3	38063i
33	293	29.1	-66 54	9.3	9.9	Go	3	..	20430b	83	1771	29.6	-27 45	9.4	10.3	G5	1	..	17401b
34	48	29.1	-86 30	7.93	8.0	A3	8	..	15145b	84	1599	29.6	-28 2	10.2	10.3	F5	1	..	17401b
35	956	29.2	+52 5	8.5	8.5	Ao	1	..	37426i	85	1883	29.6	-29 57	4.59	5.59	Ko	..	R	28,197
36	885	29.2	+35 28	8.52	8.80	Fo	4	5.2	38939i	86	1799	29.6	-37 10	8.8	10.1	Ko	2	..	41080b
37	815	29.2	+32 23	7.6	8.1	F8	4	..	37387i	87	1628	29.6	-38 30	7.45	8.0	A2	6	..	12287b
38	624	29.2	+16 47	7.36	8.36	Ko	6	0.4	6674m	88	1447	29.6	-46 16	9.5	9.8	F8	3	..	44376b
39	627	29.2	+11 17	8.2	8.6	F5	3	E	37511i	89	1414	29.6	-47 41	9.2	9.8	A3	3	..	41001b
40	788	29.2	+0 32	9.6	10.4	G5	2	..	15135b	90	294	29.6	-66 20	9.8	10.4	Go	2	..	20430b
41	867	29.2	-4 46	8.60	9.38	G5	3	..	12685b	91	949	29.7	+56 54	8.0	8.0	Ao	4	..	3898ri
42	955	29.2	-5 18	9.4	9.8	F5	1	..	12685b	92	904	29.7	+55 55	8.8	8.8	Ao	3	..	3898ri
43	905	29.2	-17 41	8.7	9.2	F8	3	..	12407b	93	1119	29.7	+48 11	7.82	7.70	B5	5	..	37406i
44	2009	29.2	-23 12	9.7	10.1	Go	2	..	23810b	94	1000	29.7	+41 4	4.46	5.46	Ko	9	R	38088i
45	1906	29.2	-31 21	8.5	9.7	Fo	2	..	41080b	95	..	29.7	+41 4	..	..	A3	..	..	..
46	1447	29.2	-40 25	8.1	9.8	Ma	4	0.2	20647b	96	999	29.7	+40 53	7.8	7.9	A2	3	..	38152i
47	1605	29.2	-44 10	8.9	9.8	G5	4	..	20647b	97	668	29.7	+21 49	8.4	9.4	Ko	4	..	38153i
48	1445	29.2	-46 1	7.8	9.2	Ko	5	..	41001b	98	1537	29.7	-39 31	10.1	9.8	Ao	2	..	20647b
49	817	29.3	+59 8	8.8	9.6	G5	1	..	38136i	99	1160	29.7	-51 0	9.2	10.7	K5	1	..	44376b
50	715	29.3	+22 50	8.5	9.5	Ko	1	..	38153i	100	355	29.7	-59 26	9.1	10.8	K5	1	..	20264b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29100

4^h 29^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	265	29.8	+70 5	8.59	9.59	Ko	2	..	38112i	51	847	30.3	- 7 30	9.3	10.3	Ko	1	..	12685b
2	336	29.8	+66 41	8.9	8.9	Ao	2	..	38112i	52	891	30.3	- 8 53	8.7	8.8	A2	3	..	12685b
3	740	29.8	+19 46	7.25	7.75	F8	4	..	37511i	53	1776	30.3	-27 39	10.2	10.6	K	1	..	17401b
4	742	29.8	+19 41	6.56	7.06	F8	6	..	37511i	54	296	30.3	-66 12	8.9	9.9	Kop	3	R	20430b
5	627	29.8	+16 53	9.6	10.4	G5	1	..	6674m	55	279	30.3	-76 45	8.5	9.3	G5	3	..	15162b
6	724	29.8	- 0 31	8.4	9.6	K5	2	..	12390b	56	1008	30.4	+42 49	7.9	8.7	G5	3	..	38088i
7	944	29.8	- 2 3	8.7	9.7	Ko	2	..	38063i	57	895	30.4	+34 45	8.57	8.85	Fo	4	5,2	37387i
8	959	29.8	- 5 39	9.2	9.8	Go	2	..	12390b	58	671	30.4	+21 30	7.8	8.2	F5	6	..	38153i
9	957	29.8	-10 48	9.2	9.5	F2	3	..	12685b	59	654	30.4	+15 28	9.1	10.1	Ko	2	..	6674m
10	929	29.8	-11 55	9.2	9.5	F2	2	..	12378b	60	673	30.4	- 1 33	9.1	9.7	G	1	..	12390b
11	1630	29.8	-38 3	9.9	10.4	G5	1	..	39655b	61	903	30.4	- 4 56	8.05	8.61	Go	5	..	12685b
12	1539	29.8	-39 42	7.70	8.0	F2	7	..	12287b	62	959	30.4	-19 25	9.3	10.3	Ko	2	..	23810b
13	1416	29.8	-47 25	9.5	9.8	A2	2	..	44376b	63	2433	30.4	-24 15	6.57	8.8	G5	7	..	23810b
14	1369	29.8	-49 54	10.3	10.4	Go	3	..	44376b	64	1795	30.4	-35 3	9.56	9.9	A2	3	..	41080b
15	314	29.8	-59 59	6.94	7.1	A5	7	..	42691b	65	1165	30.4	-51 2	9.9	9.8	Ao	3	..	44376b
16	115	29.8	-81 49	5.79	6.1	Fo	..	R	56,120	66	689	30.4	-56 11	9.1	9.5	F5	3	..	41013b
17	653	29.9	+15 58	7.5	8.3	G5	3	..	37511i	67	315	30.4	-60 5	9.0	9.9	Go	2	..	42691b
18	726	29.9	- 0 31	8.8	9.6	G5	3	..	12390b	68	366	30.4	-62 3	8.6	9.6	Ko	4	..	23802b
19	915	29.9	-21 52	9.1	11.1	Ko	1	..	23810b	69	715	30.5	+23 9	6.04	6.38	F2	9	..	38153i
20	1800	29.9	-33 53	9.9	10.4	A	1	..	41080b	70	777	30.5	+ 1 14	8.44	9.22	G5	2	..	38063i
21	1005	30.0	+42 26	8.6	8.9	Fo	2	..	38088i	71	875	30.5	- 4 50	8.60	9.60	Ko	2	..	12685b
22	914	30.0	+36 45	6.72	7.72	Ko	6	..	37260i	72	958	30.5	- 9 57	7.66	7.66	Ao	7	R	12685b
23	656	30.0	+18 36	9.6	10.7	K2	1	E	6674m	73	959	30.5	- 9 57	6.69	6.69	Ao	7	R	12685b
24	709	30.0	+ 6 28	9.2	10.2	K	1	..	38083i	74	934	30.5	-12 16	9.6	10.6	Ko	3	..	12378b
25	904	30.0	-11 50	8.7	9.5	G5	2	..	12378b	75	1612	30.5	-28 22	9.2	10.6	Ko	1	..	17401b
26	907	30.0	-17 7	8.2	9.2	Ko	2	..	12407b	76	1471	30.5	-41 7	9.1	9.9	Ko	2	..	20647b
27	1418	30.0	-47 56	9.5	10.1	Go	2	..	44376b	77	1428	30.5	-50 48	10.3	10.7	G5	1	..	44376b
28	187	30.1	+75 36	9.9	10.7	G5	1	..	6449m	78	691	30.5	-56 26	8.2	8.9	F8	5	..	41013b
29	310	30.1	+70 45	8.7	9.8	K2	2	..	38112i	79	347	30.5	-61 36	9.2	9.9	K2	4	..	23802b
30	761	30.1	+58 28	8.9	8.9	B8	4	..	38136i	80	997	30.6	+44 30	8.0	8.0	B8	3	..	38152i
31	1210	30.1	+49 39	8.7	9.2	F8	2	..	38125i	81	658	30.6	+18 27	7.8	7.9	A2	3	..	37511i
32	947	30.1	+37 14	7.56	7.56	Ao	4	..	37260i	82	717	30.6	+ 4 54	8.65	8.65	Ao	3	..	38083i
33	845	30.1	- 7 12	8.5	8.6	A2	3	..	17408b	83	892	30.6	- 8 30	8.1	8.1	Ao	7	..	12685b
34	1608	30.1	-28 40	6.88	7.5	F5	8	3,9	41080b	84	880	30.6	-20 8	6.19	7.9	Ko	9	..	23810b
35	1784	30.1	-29 25	8.1	9.3	Ko	3	..	17401b	85	1613	30.6	-28 25	9.7	9.4	Go	4	..	17401b
36	1426	30.1	-50 41	9.1	9.8	G5	2	..	38400b	86	1421	30.6	-47 8	8.9	9.8	F8	3	..	41001b
37	268	30.1	-68 6	7.8	8.4	Go	7	..	20430b	87	662	30.6	-55 49	7.1	8.7	Fo	7	..	41013b
38	48	30.1	-84 43	7.18	6.9	Bo	10	..	15145b	88	324	30.6	-67 38	9.5	10.1	Go	2	..	20430b
39	629	30.2	+16 19	1.06	2.24	K5	..	R	28,197	89	232	30.7	+72 54	8.0	9.2	K5	2	3,2	38165i
40	607	30.2	+ 9 57	4.38	4.46	A3	..	R	56,78	90	268	30.7	+71 10	9.0	9.6	G	2	R	38112i
41	775	30.2	+ 1 47	9.1	9.7	Go	2	..	15135b	91	954	30.7	+56 26	8.0	8.8	G5	2	..	37426i
42	879	30.2	-20 29	9.6	9.6	A3	3	..	23810b	92	861	30.7	+52 33	8.6	8.7	A5	5	5,3	37406i
43	1891	30.2	-30 47	7.7	8.5	Fo	4	..	41080b	93	744	30.7	+19 34	7.4	7.5	A2	5	E	37511i
44	528	30.2	-51 58	9.1	10.2	Ko	2	..	41013b	94	756	30.7	+17 42	10.5	11.7	K5	1	..	6674m
45	669	30.2	-57 23	8.2	9.2	G5	2	..	42691b	95	721	30.7	+ 9 1	8.8	8.9	A3	3	..	38083i
46	161	30.3	+78 58	8.1	8.5	F5	3	..	37558i	96	671	30.7	+ 8 2	8.0	8.0	Ao	6	..	38083i
47	422a	30.3	+65 57	var.	var.	Pec.	..	R	56,198	97	916	30.7	-20 57	7.76	8.2	G5	6	..	23810b
48	695	30.3	+63 1	8.0	8.1	A2	5	..	37556i	98	1961	30.7	-25 15	7.42	9.1	F5	7	0,8	17401b
49	793	30.3	+53 35	8.5	9.0	F8	2	..	37426i	99	1453	30.7	-40 28	8.8	10.7	K2	1	..	20647b
50	670	30.3	+21 20	7.42	8.20	G5	7	..	38153i	100	307	30.7	-70 36	9.4	9.8	F5	3	E	20430b

THE HENRY DRAPER CATALOGUE.

29200

4^h 30^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	162	30.8	+78 9	8.5	9.0	F8	3	..	37558i	51	1801	31.3	-35 47	7.07	7.8	G5	6	..	4108ob
2	469	30.8	+64 21	8.0	8.8	G5	6	0,4	38952i	52	1787	31.3	-35 58	9.5	10.6	Ao	2	..	4108ob
3	969	30.8	+46 2	7.12	8.12	Ko	4	..	37406i	53	1476	31.3	-41 2	9.5	10.1	Ko	1	..	20647b
4	1036	30.8	+40 6	8.22	8.30	A3	4	..	38088i	54	351	31.3	-65 20	9.2	10.2	Ko	3	..	2043ob
5	745	30.8	+19 17	8.4	9.0	Go	2	..	37544i	55	308	31.3	-72 29	8.2	8.6	F5	4	..	15162b
6	631	30.8	+16 6	9.3	10.3	Ko	1	..	6674m	56	173	31.4	+76 50	9.0	9.1	A2	6	1,4	6449m
7	632	30.8	+11 12	6.79	6.79	Ao	6	E	37511i	57	826	31.4	+57 53	8.7	9.3	Go	1	..	38136i
8	623	30.8	+3 52	8.4	9.2	G5	4	..	15135b	58	1015	31.4	+42 46	8.1	9.1	Ko	2	5,1	38152i
9	794	30.8	+0 11	8.43	9.50	K2	2	..	38063i	59	698	31.4	+30 12	8.56	8.54	B9	4	..	37387i
10	1918	30.8	-31 36	8.9	9.6	G5	2	..	4108ob	60	661	31.4	+18 20	var.	var.	Go	6	R	37511i
11	1806	30.8	-33 51	7.32	8.4	G5	4	..	4108ob	61	879	31.4	-4 34	8.3	9.3	Ko	4	..	12685b
12	396	30.8	-58 52	8.6	9.9	Go	3	..	42691b	62	964	31.4	-19 25	9.3	10.2	Go	2	..	2381ob
13	233	30.9	+72 47	8.0	8.3	Fo	3	..	37630i	63	919	31.4	-21 32	8.19	8.6	Go	6	..	2381ob
14	695	30.9	+30 12	7.91	8.33	F5	5	..	37387i	64	1788	31.4	-36 9	8.8	10.1	Ko	1	..	4108ob
15	632	30.9	+16 33	9.8	9.9	A5	3	..	6674m	65	1820	31.4	-37 37	9.5	10.6	F8	3	E	39655b
16	934	30.9	-9 22	8.8	10.0	K5	1	..	12685b	66	1553	31.4	-39 31	8.9	10.4	Ko	1	..	20647b
17	1746	30.9	-26 11	8.3	10.0	Ko	2	..	17401b	67	1477	31.4	-41 26	8.5	8.6	A3	6	..	20647b
18	1809	30.9	-33 21	9.5	9.9	F8	1	..	4108ob	68	342	31.5	+68 54	7.77	8.55	G5	4	..	38112i
19	1638	30.9	-38 52	9.5	10.7	Ko	2	..	39655b	69	924	31.5	+41 26	9.2	9.2	Ao	2	3,2	38152i
20	1472	30.9	-43 44	8.5	9.8	K2	3	..	4209ob	70	662	31.5	+18 29	9.1	9.7	Go	2	..	6674m
21	1394	30.9	-48 18	9.7	10.1	Go	2	..	3840ob	71	657	31.5	+15 44	7.8	8.8	Ko	4	..	6674m
22	697	31.0	+62 44	9.5	9.5	Ao	3	..	38907i	72	688	31.5	+5 10	8.61	9.61	Ko	1	..	38083i
23	958	31.0	+51 49	9.0	9.0	Ao	2	..	37406i	73	626	31.5	+3 20	8.4	9.2	G5	1	..	38063i
24	673	31.0	+27 43	7.38	7.38	Ao	5	..	37387i	74	797	31.5	+0 41	9.1	9.7	Go	4	..	15135b
25	656	31.0	+15 40	6.67	7.17	F8	5	..	37511i	75	883	31.5	-20 12	8.1	8.8	F2	4	..	2381ob
26	952	31.0	-2 26	8.1	8.1	B9	5	1,5	37408b	76	858	31.5	-22 20	9.3	10.0	F	2	R	2381ob
27	830	31.0	-3 49	6.29	6.27	B9	7	4,7	17408b	77	1559	31.5	-42 14	7.7	9.6	Ma	2	..	4209ob
28	881	31.0	-20 16	8.8	9.3	A5	3	..	2381ob	78	1594	31.5	-45 9	10.6	10.1	A2	4	..	44376b
29	918	31.0	-20 58	8.7	9.9	Ko	3	..	2381ob	79	1399	31.5	-48 39	8.6	10.1	K2	2	..	3840ob
30	1798	31.0	-35 2	7.19	8.6	Ko	6	..	4108ob	80	149	31.6	+80 28	8.1	8.9	G5	3	..	37558i
31	1797	31.0	-35 52	7.63	8.2	G5	6	..	4108ob	81	699	31.6	+62 14	8.9	9.9	Ko	2	..	38907i
32	1639	31.0	-38 29	10.1	10.7	Ko	1	..	39655b	82	960	31.6	+51 27	9.2	9.8	Go	2	..	37406i
33	1474	31.0	-43 1	9.7	11.0	Go	1	..	20647b	83	1037	31.6	+39 15	8.2	8.6	F5	2	..	38152i
34	698	31.1	+62 56	9.7	9.8	A2	2	..	38907i	84	952	31.6	+37 10	8.0	8.5	F8	3	..	38939i
35	920	31.1	+41 56	7.25	8.25	Ko	5	..	38088i	85	884	31.6	-20 23	8.6	9.3	G5	3	..	2381ob
36	783	31.1	+20 51	9.4	10.0	G	2	..	38153i	86	598	31.7	+10 39	7.62	7.62	Ao	4	E	37511i
37	796	31.1	+0 24	8.6	8.6	Ao	4	..	38063i	87	736	31.7	+2 38	8.8	8.9	A3	1	..	38063i
38	2032	31.1	-23 30	9.5	10.3	G5	2	..	2381ob	88	911	31.7	-11 28	8.7	9.7	Ko	2	..	12378b
39	2439	31.1	-24 44	6.59	7.5	F8	8	..	2381ob	89	965	31.7	-18 56	8.7	9.1	F5	3	..	2381ob
40	1810	31.1	-33 33	7.7	9.0	G5	3	..	4108ob	90	2445	31.7	-24 45	8.9	10.6	Ko	3	..	2381ob
41	1551	31.1	-39 27	9.5	9.9	F5	2	..	20647b	91	1901	31.7	-30 46	3.88	4.88	Ko	..	R	28,197
42	1374	31.1	-49 3	9.1	9.8	F5	2	..	3840ob	92	1461	31.7	-40 14	9.5	8.9	A5	5	0,3	20647b
43	278	31.1	-69 38	9.4	9.9	F8	2	..	2043ob	93	1560	31.7	-42 33	9.7	11.0	K	1	..	20647b
44	89	31.1	-82 0	8.1	9.2	K2	4	..	20538b	94	1481	31.7	-43 15	10.3	10.7	A2	2	..	20647b
45	49	31.1	-84 25	7.13	8.3	Ko	9	..	20538b	95	679	31.7	-54 53	8.5	9.5	F8	3	..	41013b
46	720	31.3	+25 32	7.61	8.68	K2	4	..	38153i	96	267	31.8	+69 45	8.0	8.0	B9	3	..	38112i
47	726	31.3	+15 4	7.29	7.85	Go	4	..	37511i	97	927	31.8	+42 3	7.01	8.01	Ko	6	..	38088i
48	834	31.3	-3 33	4.12	3.93	B2	..	R	2992c	98	729	31.8	+14 6	8.6	9.2	Go	2	..	38920i
49	1794	31.3	-29 34	8.9	9.0	K2	2	E	4108ob	99	719	31.8	+4 26	8.4	8.9	F8	4	..	38083i
50	1793	31.3	-29 51	8.9	9.4	A2	3	..	17401b	100	737	31.8	+2 22	8.8	9.4	Go	1	..	38063i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29100

4^h 29^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	265	29.8	+70 5	8.59	9.59	Ko	2	..	38112i	51	847	30.3	- 7 30	9.3	10.3	Ko	1	..	12685b
2	336	29.8	+66 41	8.9	8.9	Ao	2	..	38112i	52	891	30.3	- 8 53	8.7	8.8	A2	3	..	12685b
3	740	29.8	+19 46	7.25	7.75	F8	4	..	37511i	53	1776	30.3	-27 39	10.2	10.6	K	1	..	17401b
4	742	29.8	+19 41	6.56	7.06	F8	6	..	37511i	54	296	30.3	-66 12	8.9	9.9	Kop	3	R	20430b
5	627	29.8	+16 53	9.6	10.4	G5	1	..	6674m	55	279	30.3	-76 45	8.5	9.3	G5	3	..	15162b
6	724	29.8	- 0 31	8.4	9.6	K5	2	..	12390b	56	1008	30.4	+42 49	7.9	8.7	G5	3	..	38088i
7	944	29.8	- 2 3	8.7	9.7	Ko	2	..	38063i	57	895	30.4	+34 45	8.57	8.85	Fo	4	5,2	37387i
8	959	29.8	- 5 39	9.2	9.8	Go	2	..	12390b	58	671	30.4	+21 30	7.8	8.2	F5	6	..	38153i
9	957	29.8	-10 48	9.2	9.5	F2	3	..	12685b	59	654	30.4	+15 28	9.1	10.1	Ko	2	..	6674m
10	929	29.8	-11 55	9.2	9.5	F2	2	..	12378b	60	673	30.4	- 1 33	9.1	9.7	G	1	..	12390b
11	1630	29.8	-38 3	9.9	10.4	G5	1	..	39655b	61	963	30.4	- 4 56	8.05	8.61	Go	5	..	12685b
12	1539	29.8	-39 42	7.70	8.0	F2	7	..	12287b	62	959	30.4	-19 25	9.3	10.3	Ko	2	..	23810b
13	1416	29.8	-47 25	9.5	9.8	A2	2	..	44376b	63	2433	30.4	-24 15	6.57	8.8	G5	7	..	23810b
14	1369	29.8	-49 54	10.3	10.4	Go	3	..	44376b	64	1795	30.4	-35 3	9.56	9.9	A2	3	..	41080b
15	314	29.8	-59 59	6.94	7.1	A5	7	..	42691b	65	1165	30.4	-51 2	9.9	9.8	Ao	3	..	44376b
16	115	29.8	-81 49	5.79	6.1	Fo	..	R	56,120	66	689	30.4	-56 11	9.1	9.5	F5	3	..	41013b
17	653	29.9	+15 58	7.5	8.3	G5	3	..	37511i	67	315	30.4	-60 5	9.0	9.9	Go	2	..	42691b
18	726	29.9	- 0 31	8.8	9.6	G5	3	..	12390b	68	366	30.4	-62 3	8.6	9.6	Ko	4	..	23802b
19	915	29.9	-21 52	9.1	11.1	Ko	1	..	23810b	69	715	30.5	+23 9	6.04	6.38	F2	9	..	38153i
20	1800	29.9	-33 53	9.9	10.4	A	1	..	41080b	70	777	30.5	+ 1 14	8.44	9.22	G5	2	..	38063i
21	1005	30.0	+42 26	8.6	8.9	Fo	2	..	38088i	71	875	30.5	- 4 50	8.60	9.60	Ko	2	..	12685b
22	914	30.0	+36 45	6.72	7.72	Ko	6	..	37260i	72	958	30.5	- 9 57	7.66	7.66	Ao	7	R	12685b
23	656	30.0	+18 36	9.6	10.7	K2	1	E	6674m	73	959	30.5	- 9 57	6.69	6.69	Ao	7	R	12685b
24	709	30.0	+ 6 28	9.2	10.2	K	1	..	38083i	74	934	30.5	-12 16	9.6	10.6	Ko	3	..	12378b
25	904	30.0	-11 50	8.7	9.5	G5	2	..	12378b	75	1612	30.5	-28 22	9.2	10.6	Ko	1	..	17401b
26	907	30.0	-17 7	8.2	9.2	Ko	2	..	12407b	76	1471	30.5	-41 7	9.1	9.9	Ko	2	..	20647b
27	1418	30.0	-47 56	9.5	10.1	Go	2	..	44376b	77	1428	30.5	-50 48	10.3	10.7	G5	1	..	44376b
28	187	30.1	+75 36	9.9	10.7	G5	1	..	6449m	78	691	30.5	-56 26	8.2	8.9	F8	5	..	41013b
29	310	30.1	+70 45	8.7	9.8	K2	2	..	38112i	79	347	30.5	-61 36	9.2	9.9	K2	4	..	23802b
30	761	30.1	+58 28	8.9	8.9	B8	4	..	38136i	80	997	30.6	+44 30	8.0	8.0	B8	3	..	38152i
31	1210	30.1	+49 39	8.7	9.2	F8	2	..	38125i	81	658	30.6	+18 27	7.8	7.9	A2	3	..	37511i
32	947	30.1	+37 14	7.56	7.56	Ao	4	..	37260i	82	717	30.6	+ 4 54	8.65	8.65	Ao	3	..	38083i
33	845	30.1	- 7 12	8.5	8.6	A2	3	..	17408b	83	892	30.6	- 8 30	8.1	8.1	Ao	7	..	12685b
34	1608	30.1	-28 40	6.88	7.5	F5	8	3,9	41080b	84	880	30.6	-20 8	6.19	7.9	Ko	9	..	23810b
35	1784	30.1	-29 25	8.1	9.3	Ko	3	..	17401b	85	1613	30.6	-28 25	9.7	9.4	Go	4	..	17401b
36	1426	30.1	-50 41	9.1	9.8	G5	2	..	38400b	86	1421	30.6	-47 8	8.9	9.8	F8	3	..	41001b
37	268	30.1	-68 6	7.8	8.4	Go	7	..	20430b	87	662	30.6	-55 49	7.1	8.7	Fo	7	..	41013b
38	48	30.1	-84 43	7.18	6.9	Bo	10	..	15145b	88	324	30.6	-67 38	9.5	10.1	Go	2	..	20430b
39	629	30.2	+16 19	1.06	2.24	K5	..	R	28,197	89	232	30.7	+72 54	8.0	9.2	K5	2	3,2	38165i
40	607	30.2	+ 9 57	4.38	4.46	A3	..	R	56,78	90	268	30.7	+71 10	9.0	9.6	G	2	R	38112i
41	775	30.2	+ 1 47	9.1	9.7	Go	2	..	15135b	91	954	30.7	+56 26	8.0	8.8	G5	2	..	37426i
42	879	30.2	-20 29	9.6	9.6	A3	3	..	23810b	92	861	30.7	+52 33	8.6	8.7	A5	5	5,3	37406i
43	1891	30.2	-30 47	7.7	8.5	Fo	4	..	41080b	93	744	30.7	+19 34	7.4	7.5	A2	5	E	37511i
44	528	30.2	-51 58	9.1	10.2	Ko	2	..	41013b	94	756	30.7	+17 42	10.5	11.7	K5	1	..	6674m
45	669	30.2	-57 23	8.2	9.2	G5	2	..	42691b	95	721	30.7	+ 9 1	8.8	8.9	A3	3	..	38083i
46	161	30.3	+78 58	8.1	8.5	F5	3	..	37558i	96	671	30.7	+ 8 2	8.0	8.0	Ao	6	..	38083i
47	422a	30.3	+65 57	var.	var.	Pec.	..	R	56,198	97	916	30.7	-20 57	7.76	8.2	G5	6	..	23810b
48	695	30.3	+63 1	8.0	8.1	A2	5	..	37556i	98	1961	30.7	-25 15	7.42	9.1	F5	7	0,8	17401b
49	793	30.3	+53 35	8.5	9.0	F8	2	..	37426i	99	1453	30.7	-40 28	8.8	10.7	K2	1	..	20647b
50	670	30.3	+21 20	7.42	8.20	G5	7	..	38153i	100	307	30.7	-70 36	9.4	9.8	F5	3	E	20430b

THE HENRY DRAPER CATALOGUE.

29200

4^h 30^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	162	30.8	+78 9	8.5	9.0	F8	3	..	37558i	51	1801	31.3	-35 47	7.07	7.8	G5	6	..	41080b
2	469	30.8	+64 21	8.0	8.8	G5	6	0.4	38952i	52	1787	31.3	-35 58	9.5	10.6	A0	2	..	41080b
3	969	30.8	+46 2	7.12	8.12	K0	4	..	37406i	53	1476	31.3	-41 2	9.5	10.1	K0	1	..	20647b
4	1036	30.8	+40 6	8.22	8.30	A3	4	..	38088i	54	351	31.3	-65 20	9.2	10.2	K0	3	..	20430b
5	745	30.8	+19 17	8.4	9.0	G0	2	..	37544i	55	308	31.3	-72 29	8.2	8.6	F5	4	..	15162b
6	631	30.8	+16 6	9.3	10.3	K0	1	..	6674m	56	173	31.4	+76 50	9.0	9.1	A2	6	1.4	6449m
7	632	30.8	+11 12	6.79	6.79	A0	6	E	37511i	57	826	31.4	+57 53	8.7	9.3	G0	1	..	38136i
8	623	30.8	+ 3 52	8.4	9.2	G5	4	..	15135b	58	1015	31.4	+42 46	8.1	9.1	K0	2	5.1	38152i
9	794	30.8	+ 0 11	8.43	9.50	K2	2	..	38063i	59	698	31.4	+30 12	8.56	8.54	B9	4	..	37387i
10	1918	30.8	-31 36	8.9	9.6	G5	2	..	41080b	60	661	31.4	+18 20	var.	var.	G0	6	R	37511i
11	1806	30.8	-33 51	7.32	8.4	G5	4	..	41080b	61	879	31.4	- 4 34	8.3	9.3	K0	4	..	12685b
12	396	30.8	-58 52	8.6	9.9	G0	3	..	42691b	62	964	31.4	-19 25	9.3	10.2	G0	2	..	23810b
13	233	30.9	+72 47	8.0	8.3	F0	3	..	37630i	63	919	31.4	-21 32	8.19	8.6	G0	6	..	23810b
14	695	30.9	+30 12	7.91	8.33	F5	5	..	37387i	64	1788	31.4	-36 9	8.8	10.1	K0	1	..	41080b
15	632	30.9	+16 33	9.8	9.9	A5	3	..	6674m	65	1820	31.4	-37 37	9.5	10.6	F8	3	E	39655b
16	934	30.9	- 9 22	8.8	10.0	K5	1	..	12685b	66	1553	31.4	-39 31	8.9	10.4	K0	1	..	20647b
17	1746	30.9	-26 11	8.3	10.0	K0	2	..	17401b	67	1477	31.4	-41 26	8.5	8.6	A3	6	..	20647b
18	1809	30.9	-33 21	9.5	9.9	F8	1	..	41080b	68	342	31.5	+68 54	7.77	8.55	G5	4	..	38112i
19	1638	30.9	-38 52	9.5	10.7	K0	2	..	39655b	69	924	31.5	+41 26	9.2	9.2	A0	2	3.2	38152i
20	1472	30.9	-43 44	8.5	9.8	K2	3	..	42090b	70	662	31.5	+18 29	9.1	9.7	G0	2	..	6674m
21	1394	30.9	-48 18	9.7	10.1	G0	2	..	38400b	71	657	31.5	+15 44	7.8	8.8	K0	4	..	6674m
22	697	31.0	+62 44	9.5	9.5	A0	3	..	38907i	72	688	31.5	+ 5 10	8.61	9.61	K0	1	..	38083i
23	958	31.0	+51 49	9.0	9.0	A0	2	..	37406i	73	626	31.5	+ 3 20	8.4	9.2	G5	1	..	38063i
24	673	31.0	+27 43	7.38	7.38	A0	5	..	37387i	74	797	31.5	+ 0 41	9.1	9.7	G0	4	..	15135b
25	656	31.0	+15 40	6.67	7.17	F8	5	..	37511i	75	883	31.5	-20 12	8.1	8.8	F2	4	..	23810b
26	952	31.0	- 2 26	8.1	8.1	B9	5	1.5	37408b	76	858	31.5	-22 20	9.3	10.0	F	2	R	23810b
27	830	31.0	- 3 49	6.29	6.27	B9	7	4.7	17408b	77	1559	31.5	-42 14	7.7	9.6	Ma	2	..	42090b
28	881	31.0	-20 16	8.8	9.3	A5	3	..	23810b	78	1594	31.5	-45 9	10.6	10.1	A2	4	..	44376b
29	918	31.0	-20 58	8.7	9.9	K0	3	..	23810b	79	1399	31.5	-48 39	8.6	10.1	K2	2	..	38400b
30	1798	31.0	-35 2	7.19	8.6	K0	6	..	41080b	80	149	31.6	+80 28	8.1	8.9	G5	3	..	37558i
31	1797	31.0	-35 52	7.63	8.2	G5	6	..	41080b	81	699	31.6	+62 14	8.9	9.9	K0	2	..	38907i
32	1639	31.0	-38 29	10.1	10.7	K0	1	..	39655b	82	960	31.6	+51 27	9.2	9.8	G0	2	..	37406i
33	1474	31.0	-43 1	9.7	11.0	G0	1	..	20647b	83	1037	31.6	+39 15	8.2	8.6	F5	2	..	38152i
34	698	31.1	+62 56	9.7	9.8	A2	2	..	38907i	84	952	31.6	+37 10	8.0	8.5	F8	3	..	38939i
35	920	31.1	+41 56	7.25	8.25	K0	5	..	38088i	85	884	31.6	-20 23	8.6	9.3	G5	3	..	23810b
36	783	31.1	+20 51	9.4	10.0	G	2	..	38153i	86	598	31.7	+10 39	7.62	7.62	A0	4	E	37511i
37	796	31.1	+ 0 24	8.6	8.6	A0	4	..	38063i	87	736	31.7	+ 2 38	8.8	8.9	A3	1	..	38063i
38	2032	31.1	-23 30	9.5	10.3	G5	2	..	23810b	88	911	31.7	-11 28	8.7	9.7	K0	2	..	12378b
39	2439	31.1	-24 44	6.59	7.5	F8	8	..	23810b	89	965	31.7	-18 56	8.7	9.1	F5	3	..	23810b
40	1810	31.1	-33 33	7.7	9.0	G5	3	..	41080b	90	2445	31.7	-24 45	8.9	10.6	K0	3	..	23810b
41	1551	31.1	-39 27	9.5	9.9	F5	2	..	20647b	91	1901	31.7	-30 46	3.88	4.88	K0	..	R	28,197
42	1374	31.1	-49 3	9.1	9.8	F5	2	..	38400b	92	1461	31.7	-40 14	9.5	8.9	A5	5	0.3	20647b
43	278	31.1	-69 38	9.4	9.9	F8	2	..	20430b	93	1560	31.7	-42 33	9.7	11.0	K	1	..	20647b
44	89	31.1	-82 0	8.1	9.2	K2	4	..	20538b	94	1481	31.7	-43 15	10.3	10.7	A2	2	..	20647b
45	49	31.1	-84 25	7.13	8.3	K0	9	..	20538b	95	679	31.7	-54 53	8.5	9.5	F8	3	..	41013b
46	720	31.3	+25 32	7.61	8.68	K2	4	..	38153i	96	267	31.8	+69 45	8.0	8.0	B9	3	..	38112i
47	726	31.3	+15 4	7.29	7.85	G0	4	..	37511i	97	927	31.8	+42 3	7.01	8.01	K0	6	..	38088i
48	834	31.3	- 3 33	4.12	3.93	B2	..	R	2992c	98	729	31.8	+14 6	8.6	9.2	G0	2	..	38920i
49	1794	31.3	-29 34	8.9	9.0	K2	2	E	41080b	99	719	31.8	+ 4 26	8.4	8.9	F8	4	..	38083i
50	1793	31.3	-29 51	8.9	9.4	A2	3	..	17401b	100	737	31.8	+ 2 22	8.8	9.4	G0	1	..	38063i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29300

4^h 31^m 8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	730	31.8	- 0 18	8.2	9.3	K2	2	..	12390b	51	827	32.3	+57 10	8.7	8.7	Ao	3	..	3897oi
2	913	31.8	-17 39	7.83	8.11	Fo	7	..	23810b	52	818	32.3	+32 29	8.5	8.5	A	2	..	37387i
3	1481	31.8	-41 46	8.0	8.9	Go	3	..	42090b	53	660	32.3	+15 29	10.5	11.0	F8	1	..	6674m
4	1482	31.8	-43 49	9.7	10.4	Fo	2	..	20647b	54	723	32.3	+ 4 47	8.0	8.3	Fo	6	R	38083i
5	663	31.8	-55 15	3.47	3.47	Aop	..	R	28,197	55	800	32.3	+ 0 22	8.34	9.12	G5	..	R	56,233
6	352	31.8	-65 4	9.10	9.8	G5	4	..	20430b	56	801	32.3	+ 0 20	8.36	9.14	G5	..	..	..
7	1026	31.9	+51 1	8.1	8.6	F8	3	..	37406i	57	879	32.3	-18 5	8.9	9.7	G5	2	..	12407b
8	921	31.9	+38 15	7.7	7.7	B8	4	..	37260i	58	1753	32.3	-26 46	8.3	10.3	Ko	2	..	17401b
9	803	31.9	+31 48	7.08	6.91	B3	5	..	37387i	59	674	32.3	-56 58	8.5	9.5	G5	2	..	42691b
10	728	31.9	+14 57	7.79	8.35	Go	3	..	37511i	60	310	32.3	-72 36	8.5	9.6	K2	1	..	20540b
11	738	31.9	+ 2 30	8.8	9.8	Ko	4	..	15135b	61	470	32.4	+64 54	8.6	8.6	Ao	4	1,3	38907i
12	921	31.9	-21 31	8.26	8.4	G5	5	..	23810b	62	796	32.4	+53 17	8.9	9.0	A3	2	..	37426i
13	1820	31.9	-33 23	8.9	9.9	G5	2	..	46020b	63	918	32.4	+36 22	7.61	7.69	A3	4	..	37260i
14	1556	31.9	-39 45	9.5	10.4	F8	2	..	20647b	64	731	32.4	+26 45	6.49	6.77	Fo	6	..	37387i
15	1464	31.9	-40 25	8.8	9.9	K2	3	..	20647b	65	785	32.4	+20 30	5.73	5.71	B9	5	..	9673i
16	794	32.0	+53 17	5.44	5.72	Fo	10	..	37406i	66	782	32.4	+ 1 20	9.1	9.9	G5	2	..	15135b
17	865	32.0	+52 53	5.31	6.31	Ko	9	..	37406i	67	896	32.4	- 8 38	8.8	9.8	Ko	2	..	12685b
18	718	32.0	+22 46	9.8	10.6	G5	1	..	38153i	68	819	32.4	-15 7	8.5	9.1	Go	4	..	12378b
19	659	32.0	+15 10	8.89	9.96	K2	2	..	6674m	69	863	32.4	-22 29	8.3	8.2	B9	7	..	23810b
20	722	32.0	+ 4 41	9.8	10.2	F5	1	..	15135b	70	1564	32.4	-42 12	9.3	9.9	Ko	2	..	20647b
21	721	32.0	+ 4 18	9.1	10.2	K2	1	..	15135b	71	828	32.5	+57 41	7.09	7.07	B9	5	..	37426i
22	629	32.0	+ 3 39	9.1	9.7	G	2	..	15135b	72	1028	32.5	+50 55	8.0	9.0	Ko	2	..	38125i
23	894	32.0	- 8 40	6.91	6.91	Ao	4	..	2298b	73	1033	32.5	+43 28	8.0	8.0	B9	3	..	38088i
24	2449	32.0	-24 37	10.2	10.7	A	2	..	23810b	74	1013	32.5	+40 20	9.4	9.5	A3	2	..	38937i
25	1794	32.0	-27 48	9.4	10.6	Ko	1	..	17401b	75	661	32.5	+15 51	5.80	6.08	Fo	5	0,8	37511i
26	1484	32.0	-41 56	9.5	10.4	G5	1	..	20647b	76	676	32.5	+ 7 7	6.89	6.77	B5	8	..	38083i
27	355	32.0	-65 13	8.70	9.9	Ko	4	..	20430b	77	1799	32.5	-27 15	7.18	8.5	F5	9	..	17401b
28	16	32.0	-89 31	9.5	10.5	K	2	R	22578b	78	1927	32.5	-31 2	8.1	9.3	F5	3	..	41080b
29	174	32.1	+76 25	6.51	6.93	F5	7	0,9	37558i	79	1650	32.5	-38 22	8.8	9.2	Ao	3	..	42916b
30	340	32.1	+67 6	7.8	7.8	Ao	5	0,5	38112i	80	1485	32.5	-41 5	10.1	10.1	Fo	1	..	20647b
31	866	32.1	+52 37	8.2	9.3	K2	2	..	3897oi	81	1436	32.5	-50 40	9.5	10.2	Ko	2	..	44376b
32	1009	32.1	+41 3	8.8	8.9	A5	3	5,3	38088i	82	322	32.5	-60 1	9.09	9.8	Go	2	..	42691b
33	725	32.1	+29 12	8.5	8.6	A2	1	..	37387i	83	..	32.5	-63 14	var.	var.	Md	5	R	20430b
34	672	32.1	+24 21	9.1	9.2	A3	1	..	38153i	84	..	32.6	+74 56	var.	var.	Md	3	R	6449m
35	798	32.1	+ 0 48	5.32	5.20	B5	..	..	56,78	85	911	32.6	+55 40	8.6	9.7	K2	1	..	3897oi
36	861	32.1	-22 27	8.1	9.0	G5	4	..	23810b	86	663	32.6	+15 19	8.3	9.4	K2	2	..	6674m
37	533	32.1	-52 36	8.7	9.0	A2	6	..	41013b	87	662	32.6	+15 15	9.8	10.8	Ko	1	..	6674m
38	665	32.1	-55 34	8.8	9.5	F5	3	..	41013b	88	618	32.6	+12 19	4.30	4.38	A3	..	1, R	56,78
39	356	32.1	-65 28	8.9	9.5	Go	6	..	20430b	89	690	32.6	+ 5 36	8.6	9.1	F8	3	..	15135b
40	313	32.2	+71 0	9.2	9.8	G	2	..	38112i	90	804	32.6	+ 0 56	10.5	11.0	F8	2	..	15135b
41	867	32.2	+52 17	8.0	8.0	Ao	5	2,4	3897oi	91	963	32.6	- 2 40	5.31	5.45	A5	..	2,9 R	2992c
42	674	32.2	+28 32	8.4	8.9	F8	3	..	37387i	92	968	32.6	-10 3	8.81	9.31	F8	3	..	12685b
43	673	32.2	+ 7 54	9.3	9.3	A	2	..	38083i	93	947	32.6	-12 22	8.2	9.4	K5	3	..	12378b
44	799	32.2	+ 1 3	8.84	9.34	F8	4	0,2	15135b	94	931	32.6	-14 19	8.5	9.0	F8	2	..	12378b
45	732	32.2	+ 0 5	8.15	8.29	A5	3	..	12390b	95	887	32.6	-20 18	8.8	9.9	G5	2	..	23810b
46	967	32.2	-10 5	8.5	8.8	Fo	3	..	12685b	96	864	32.6	-22 30	8.8	9.0	Go	4	..	23810b
47	1823	32.2	-33 7	9.5	11.1	Ko	1	..	46020b	97	1755	32.6	-26 38	8.2	9.5	F5	5	..	17401b
48	1625	32.2	-44 12	9.5	10.1	Go	3	..	20647b	98	534	32.6	-52 55	7.5	9.2	Ko	5	..	41013b
49	1601	32.2	-45 3	9.7	10.4	K2	2	..	44376b	99	342	32.6	-63 2	5.86	7.1	Ko	..	..	56,120
50	1434	32.2	-50 50	9.9	10.4	G5	1	..	44376b	100	343	32.7	+66 33	8.9	9.7	G5	3	..	38112i

THE HENRY DRAPER CATALOGUE.

29400

4^h 32^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	830	32.7	+57 44	8.0	8.0	Ao	5	..	3898ri	51	891	33.2	-20 24	9.1	9.9	F8	3	..	2381ob
2	667	32.7	+18 52	9.3	9.4	A2	2	0,2	3892oi	52	1806	33.2	-29 30	8.9	9.4	K5	1	..	17401b
3	666	32.7	+18 33	8.4	8.4	Ao	4	..	3892oi	53	1915	33.2	-30 38	6.88	8.4	Ko	6	..	4108ob
4	733	32.7	-0 22	8.4	9.4	Ko	2	..	1239ob	54	1437	33.2	-47 52	9.1	10.6	Go	2	..	3840ob
5	964	32.7	-2 51	7.06	8.06	Ko	3	..	38063i	55	727	33.2	-53 1	9.3	9.8	F8	3	..	41013b
6	975	32.7	-5 42	9.1	9.2	A3	3	..	12685b	56	1019	33.3	+48 2	8.4	8.7	F2	4	..	37406i
7	824	32.7	-15 54	8.7	9.8	K2	2	..	12378b	57	1017	33.3	+40 36	6.66	7.00	F2	6	..	3726oi
8	700	32.8	+62 28	9.5	10.6	K2	1	..	38907i	58	1042	33.3	+39 36	7.57	8.64	K2	3	..	38088i
9	893	32.8	+35 46	7.76	7.76	Ao	4	..	38934i	59	674	33.3	+25 2	6.27	6.35	A3	9	..	38153i
10	728	32.8	+8 31	7.8	8.8	Ko	4	..	38083i	60	634	33.3	+16 59	9.8	9.9	A2	3	..	6674m
11	..	32.8	+8 8	var.	var.	Md	..	R	56,198	61	702	33.3	+13 55	8.2	9.0	G5	3	..	37544i
12	898	32.8	-8 34	8.7	8.7	A	3	..	12685b	62	728	33.3	+6 40	8.4	8.5	A5	4	..	38083i
13	1827	32.8	-33 15	9.2	10.4	G5	1	..	4602ob	63	787	33.3	+1 53	9.1	9.6	F8	4	..	15135b
14	1410	32.8	-48 56	9.2	10.1	G5	2	..	3840ob	64	919	33.3	-17 36	8.1	8.1	Ao	8	..	2381ob
15	536	32.8	-52 37	9.7	10.1	F5	2	..	41013b	65	881	33.3	-18 31	7.77	8.77	Ko	7	..	2381ob
16	401	32.8	-58 27	8.5	9.5	K2	2	..	42691b	66	1916	33.3	-30 9	8.5	8.7	Fo	4	0,3	17401b
17	1021	32.9	+42 14	8.7	9.1	F5	1	..	38088i	67	1893	33.3	-32 46	9.2	9.7	F8	2	0,2	4108ob
18	805	32.9	+31 34	7.8	8.1	Fo	4	..	37387i	68	1774	33.3	-34 43	9.2	11.0	Go	2	5,2	4602ob
19	721	32.9	+22 58	8.4	8.8	F5	5	..	38153i	69	1801	33.3	-36 3	9.4	9.9	A2	2	..	4108ob
20	759	32.9	+17 12	7.7	8.0	Fo	4	..	37544i	70	1569	33.3	-42 32	8.7	9.8	G5	3	..	4209ob
21	905	32.9	-16 33	8.5	8.5	Ao	4	..	12378b	71	1495	33.3	-43 39	7.9	9.8	Ko	3	..	4209ob
22	1977	32.9	-25 22	8.7	9.7	A5	3	..	17401b	72	729	33.3	-53 45	7.8	9.4	Ko	3	..	41013b
23	1762	32.9	-26 30	9.5	10.3	Ko	1	..	17401b	73	671	33.3	-55 6	8.08	8.4	Go	6	..	41013b
24	1888	32.9	-32 0	8.5	9.4	Ko	2	..	4108ob	74	50	33.3	-88 32	8.1	8.9	G5	5	..	15145b
25	1890	32.9	-32 46	8.9	9.9	Go	2	5,2	4108ob	75	88	33.4	+84 42	7.53	7.59	A2	5	2,7	37558i
26	1828	32.9	-33 49	8.5	8.7	F5	3	..	4108ob	76	343	33.4	+67 57	8.0	8.0	Ao	5	..	38952i
27	1655	32.9	-38 2	7.12	7.6	Fo	8	..	12287b	77	677	33.4	+28 36	8.1	8.2	A2	3	..	37387i
28	1558	32.9	-39 37	8.8	9.2	G5	4	5,2	20647b	78	635	33.4	+16 24	10.5	10.5	A	1	..	6674m
29	1184	32.9	-51 11	9.1	9.8	Ko	3	..	3840ob	79	665	33.4	+15 36	5.15	5.21	A2	..	0,9 R	56,78
30	1022	33.0	+43 4	8.7	8.7	A	2	..	38088i	80	730	33.4	+6 38	8.4	9.8	Ma	2	..	38083i
31	790	33.0	+20 23	9.0	9.4	F5	3	..	38153i	81	920	33.4	-11 21	8.5	9.6	K2	4	..	12685b
32	735	33.0	-0 51	9.1	9.1	Ao	4	..	15135b	82	937	33.4	-13 14	6.77	6.77	Ao	6	..	8862b
33	867	33.0	-22 49	7.64	7.7	B9	8	..	2381ob	83	1821	33.4	-35 49	7.96	9.2	Ko	3	..	4108ob
34	1978	33.0	-25 46	8.2	9.8	Go	3	..	17401b	84	1465	33.4	-46 29	8.6	9.8	Ko	4	..	3840ob
35	1911	33.0	-30 55	6.29	5.8	B8	..	..	56,120	85	1442	33.4	-50 29	9.7	10.6	Ko	1	..	44376b
36	1490	33.0	-43 50	9.1	10.1	G5	2	..	4209ob	86	1222	33.5	+49 52	8.22	8.64	F5	3	..	37406i
37	1462	33.0	-46 34	9.0	10.1	Ko	2	..	3840ob	87	1036	33.5	+43 55	7.32	7.30	B9	7	..	38088i
38	402	33.0	-58 48	9.2	9.8	G	1	..	20264b	88	666	33.5	+15 43	4.85	4.93	A3	..	0,9 R	56,78
39	403	33.0	-58 49	9.1	9.5	Go	1	..	20264b	89	742	33.5	+2 15	9.5	10.1	Go	2	..	15135b
40	327	33.0	-67 31	9.0	10.1	K2	3	..	2043ob	90	889	33.5	-4 22	8.5	9.7	K5	2	..	12685b
41	678	33.1	+7 59	8.0	7.8	B3	6	R	38083i	91	978	33.5	-5 35	8.3	9.1	G5	2	..	12685b
42	889	33.1	-19 56	9.41	10.5	F8	2	..	2381ob	92	953	33.5	-6 5	8.7	8.8	A2	3	..	1239ob
43	2052	33.1	-23 15	7.9	7.4	B8	8	..	2381ob	93	116	33.5	-81 48	8.6	8.6	Ao	4	..	20538b
44	2459	33.1	-24 15	10.2	10.9	G5	2	..	2381ob	94	1037	33.6	+43 10	8.6	8.9	F	2	..	38088i
45	1805	33.1	-29 9	8.1	8.7	F8	4	..	17401b	95	820	33.6	+32 57	8.2	8.7	F8	3	..	37387i
46	1604	33.1	-45 21	7.2	7.8	F2	7	..	41001b	96	636	33.6	+16 33	8.8	10.0	K5	2	..	6674m
47	362	33.1	-59 21	8.0	9.3	Ko	3	..	42691b	97	620	33.6	+12 48	7.26	7.68	F5	4	R	37511i
48	279	33.1	-69 34	9.1	9.6	F8	2	..	2043ob	98	620	33.6	+9 28	9.1	9.1	Ao	3	..	38083i
49	530	33.2	+63 44	9.4	10.0	Go	3	..	38907i	99	681	33.6	+7 40	5.55	5.83	Fo	10	..	38083i
50	725	33.2	+22 28	8.6	8.6	B9	3	..	38153i	100	739	33.6	-0 36	8.8	9.3	F8	4	..	15135b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29500

4^h 33^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	901	33.6	- 8 28	8.7	9.7	Ko	2	..	12685b	51	981	34.1	- 5 0	8.35	9.53	K5	3	..	12685b
2	939	33.6	-13 27	7.9	8.4	F8	4	..	8862b	52	954	34.1	- 5 58	9.2	10.0	G5	1	..	12685b
3	933	33.6	-14 30	3.98	4.98	Ko	..	5, R	28,110	53	864	34.1	- 7 35	8.9	9.9	Ko	1	..	12685b
4	921	33.6	-16 55	7.7	8.8	K2	4	..	12407b	54	903	34.1	- 8 25	7.7	7.7	B9	3	..	2298b
5	883	33.6	-18 0	7.73	8.73	Ko	7	E	23810b	55	978	34.1	-19 2	8.9	10.8	Ko	2	..	23810b
6	892	33.6	-20 53	7.10	6.5	B8	5	0,10	17429b	56	979	34.1	-19 50	7.03	7.2	A3	4	2,9	8862b
7	1806	33.6	-26 59	8.1	8.9	A2	7	..	17401b	57	2465	34.1	-24 52	8.55	9.1	B8	6	..	17401b
8	1642	33.6	-28 23	9.1	10.3	F8	2	..	17401b	58	1483	34.1	-40 44	9.7	10.4	Go	2	..	20647b
9	1496	33.6	-41 28	9.9	9.9	F5	1	..	20647b	59	1572	34.1	-42 5	6.59	7.0	A5	..	0,10	28,197
10	537	33.6	-52 1	9.2	9.8	F8	2	..	41013b	60	1389	34.1	-49 22	8.1	9.3	Ko	4	..	38400b
11	701	33.7	+62 35	9.0	10.0	Ko	2	..	38907i	61	796	34.2	+20 21	8.9	9.0	A2	2	..	38153i
12	680	33.7	+21 20	8.2	8.6	F5	4	..	38153i	62	637	34.2	+16 20	8.61	9.03	F5	4	..	6674m
13	686	33.7	- 1 4	8.8	9.9	K2	2	..	12390b	63	895	34.2	- 4 53	9.10	9.10	Ao	4	..	12685b
14	1918	33.7	-30 6	8.04	8.5	F5	6	3,5	17401b	64	973	34.2	-10 53	9.3	9.3	Ao	2	..	12685b
15	732	33.7	-53 27	8.7	10.4	Ko	2	..	41013b	65	1783	34.2	-34 6	9.4	10.4	Go	2	..	41080b
16	795	33.8	+54 28	8.0	8.0	Ao	4	..	37426i	66	1573	34.2	-42 15	9.0	9.5	A2	3	..	42090b
17	683	33.8	+ 7 48	7.8	8.6	G5	1	..	38083i	67	1575	34.2	-42 34	10.1	10.9	G5	2	..	42090b
18	810	33.8	+ 0 20	9.8	10.8	Ko	3	..	15135b	68	1499	34.2	-43 5	9.3	10.2	Ko	1	..	42090b
19	742	33.8	- 0 0	9.08	9.86	G5	2	..	15135b	69	1448	34.2	-50 21	9.9	10.2	G5	1	..	44376b
20	861	33.8	- 7 43	8.9	9.9	Ko	1	..	12685b	70	330	34.2	-67 30	9.4	9.9	F8	3	..	20430b
21	947	33.8	- 9 32	7.71	8.21	F8	6	..	12685b	71	769	34.3	+58 14	8.6	9.8	K5	1	3,1	38136i
22	933	33.8	-21 2	9.1	9.9	Go	2	..	23810b	72	763	34.3	+17 26	9.8	9.8	Ao	2	2,1	6674m
23	2062	33.8	-23 8	10.6	10.0	F8	2	..	23810b	73	955	34.3	-12 19	5.02	5.08	A2	..	2,10	56,78
24	1919	33.8	-30 40	9.5	9.1	Ko	2	..	46020b	74	942	34.3	-13 32	8.5	9.5	Ko	1	..	12378b
25	1419	33.8	-48 36	9.2	10.7	Ko	2	..	38400b	75	886	34.3	-18 52	8.7	9.1	F5	3	..	23810b
26	1128	33.9	+48 7	5.70	5.70	Ao	..	0,9	56,78	76	1770	34.3	-26 24	8.9	9.8	Fo	4	..	17401b
27	671	33.9	+18 22	9.5	9.5	Ao	2	..	6674m	77	1830	34.3	-35 44	10.1	10.4	A3	2	..	42916b
28	622	33.9	+12 57	8.9	9.9	Ko	2	..	38920i	78	685	34.3	-54 49	8.78	8.8	A5	5	..	41013b
29	789	33.9	+ 1 56	8.4	9.2	G5	2	..	38063i	79	162	34.4	+81 19	9.5	9.5	A	2	..	37558i
30	948	33.9	- 9 14	8.9	9.3	F5	2	..	12685b	80	1006	34.4	+44 19	8.0	8.0	B9	2	..	38088i
31	1609	33.9	-45 9	9.3	9.8	A3	4	..	44376b	81	704	34.4	+30 7	8.06	8.48	F5	5	..	37387i
32	678	33.9	-57 38	7.5	8.5	F8	5	..	42691b	82	744	34.4	+ 3 2	9.1	9.7	Go	3	..	15135b
33	273	33.9	-71 6	9.3	9.6	F2	3	0,4	20540b	83	743	34.4	- 0 17	7.63	8.63	Ko	4	..	38063i
34	767	34.0	+58 44	8.7	8.7	Ao	3	0,3	37426i	84	937	34.4	-21 36	9.1	10.0	F5	2	..	23810b
35	799	34.0	+53 24	8.4	9.4	Ko	3	..	37406i	85	1785	34.4	-34 19	7.7	8.7	G5	5	..	41080b
36	924	34.0	+36 41	8.25	8.33	A3	2	..	37260i	86	723	34.5	+61 35	10.2	11.6	Mb	..	..	M
37	728	34.0	+29 47	6.92	7.20	Fo	7	..	37387i	87	931	34.5	+41 57	7.29	7.85	Go	5	..	38088i
38	728	34.0	+22 49	8.8	8.9	A2	2	..	38153i	88	639	34.5	+16 12	9.5	10.0	F8	1	..	6674m
39	728	34.0	+ 4 33	8.8	10.0	K5	2	..	15135b	89	639	34.5	+12 0	5.37	5.35	B9	..	0,9	56,78
40	811	34.0	+ 0 7	8.88	9.95	K2	2	2,1	12390b	90	984	34.5	- 5 5	8.7	9.3	Go	4	..	12685b
41	934	34.0	-21 35	9.3	9.9	Ao	3	..	23810b	91	982	34.5	- 5 10	9.3	9.4	A2	3	..	12685b
42	1809	34.0	-27 28	7.84	10.0	K2	4	..	17401b	92	828	34.5	-15 9	9.1	9.7	Go	2	..	12378b
43	1938	34.0	-31 37	7.7	9.0	G5	4	..	41080b	93	981	34.5	-19 5	8.9	10.0	Ko	3	..	23810b
44	1836	34.0	-37 39	10.5	10.1	Ko	1	..	42916b	94	980	34.5	-19 11	9.6	10.0	Ao	3	..	23810b
45	1610	34.0	-45 3	9.5	10.4	Go	1	..	44376b	95	1951	34.5	-31 35	8.9	9.7	G5	2	..	41080b
46	353	34.0	-64 52	9.8	10.1	Fo	3	..	20430b	96	1490	34.5	-40 52	10.8	10.7	A5	1	..	20647b
47	303	34.0	-66 24	8.9	9.3	F5	6	..	20430b	97	539	34.5	-52 3	8.3	9.0	Go	4	..	41013b
48	121	34.1	+83 7	8.6	9.0	F5	4	..	37558i	98	91	34.5	-83 7	6.76	6.8	A2	10	..	20557b
49	345	34.1	+66 35	8.0	9.0	Ko	2	..	38112i	99	964	34.6	+57 1	8.0	8.5	F8	3	..	37426i
50	762	34.1	+17 17	8.0	9.0	Ko	5	5,2	6674m	100	1226	34.6	+49 44	7.62	7.62	Ao	4	..	37406i

THE HENRY DRAPER CATALOGUE.

29600

4^h 34^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	765	34.6	+17 56	8.6	9.4	G5	3	5,2	3892oi	51	985	35.0	-19 20	8.7	10.0	Ko	3	..	2381ob
2	732	34.6	+ 7 5	8.4	9.2	G5	3	..	38083i	52	1838	35.0	-35 30	8.8	9.0	F8	4	..	4108ob
3	982	34.6	-19 49	9.6	11.3	K	1	..	2381ob	53	1498	35.0	-40 47	9.1	9.2	G5	5	5,2	20647b
4	1954	34.6	-31 21	8.9	9.7	G5	3	..	4108ob	54	1432	35.0	-48 29	9.1	9.8	G5	3	..	3840ob
5	1613	34.6	-45 5	9.9	10.4	F5	1	..	44376b	55	1391	35.0	-49 25	10.6	10.4	Ko	2	..	44376b
6	826	34.7	+59 20	6.53	6.61	A3	7	0,7	37426i	56	702	35.0	-56 50	9.1	9.7	A3	2	..	42691b
7	932	34.7	+41 23	8.7	9.1	F5	1	..	38088i	57	681	35.0	-57 8	8.4	9.5	Ko	3	..	42691b
8	640	34.7	+16 20	9.37	10.37	Ko	1	..	6674m	58	274	35.0	-75 53	8.6	9.2	Go	8	..	15162b
9	733	34.7	+ 6 11	8.9	8.9	Ao	3	..	15135b	59	315	35.1	+70 16	9.5	9.6	A2	1	..	38112i
10	689	34.7	- 1 15	6.18	7.18	Ko	6	..	38063i	60	770	35.1	+58 22	8.6	9.0	F5	3	3,2	38136i
11	855	34.7	- 3 34	8.7	8.7	Ao	3	..	12685b	61	1023	35.1	+47 57	8.4	9.2	G5	1	..	38125i
12	950	34.7	- 9 8	9.1	9.7	Go	2	..	12685b	62	869	35.1	- 7 24	8.7	9.0	F2	3	..	12685b
13	936	34.7	-14 33	5.61	6.39	G5	6	..	8862b	63	937	35.1	-14 47	7.81	8.31	F8	2	..	8862b
14	896	34.7	-19 55	8.93	9.9	Go	3	..	2381ob	64	916	35.1	-16 45	8.9	9.7	G5	2	..	12407b
15	1816	34.7	-27 14	8.7	9.5	Go	4	..	17401b	65	1962	35.1	-31 25	8.1	8.8	F2	4	..	4108ob
16	1430	34.7	-48 22	10.3	10.7	F5	1	..	3840ob	66	1499	35.1	-40 25	9.1	9.5	F8	3	7,2 R	20647b
17	1452	34.7	-49 58	9.9	10.6	Fo	2	..	44376b	67	1644	35.1	-44 50	7.84	8.3	A5	6	..	41001b
18	541	34.7	-52 27	9.3	10.1	G5	1	..	41013b	68	345	35.2	+67 44	8.6	9.4	G5	2	..	38112i
19	270	34.8	+69 38	8.4	9.4	Ko	2	..	38112i	69	767	35.2	+17 55	10.5	10.5	A	1	..	6674m
20	900	34.8	+34 30	7.96	8.96	Ko	3	5,2	37387i	70	927	35.2	-17 9	7.83	9.01	K5	5	..	12407b
21	723	34.8	+23 38	8.8	9.6	G5	2	..	38153i	71	688	35.2	-54 52	9.5	10.0	F8	2	..	41013b
22	766	34.8	+17 12	8.9	9.9	Ko	1	5,1	3892oi	72	282	35.2	-69 17	9.2	9.5	Fo	4	..	2043ob
23	958	34.8	-12 43	8.6	9.2	Go	3	..	12378b	73	347	35.3	+66 46	9.2	9.2	Ao	2	..	38112i
24	913	34.8	-16 10	8.7	8.7	A	3	..	12378b	74	941	35.3	-21 26	7.18	8.4	G5	7	..	2381ob
25	2473	34.8	-23 58	9.9	10.3	F5	3	..	2381ob	75	1819	35.3	-36 23	8.9	10.1	K2	2	..	4108ob
26	1990	34.8	-25 54	7.30	9.1	Ko	7	..	17401b	76	542	35.3	-52 15	8.5	10.1	K2	1	..	41013b
27	1834	34.8	-35 23	10.8	11.3	G5	1	..	4108ob	77	543	35.3	-52 46	8.8	9.8	F5	2	..	41013b
28	1617	34.8	-44 59	8.70	9.8	Ko	2	..	41001b	78	189	35.4	+75 46	6.04	6.32	Fo	8	..	37558i
29	142	34.8	-78 27	9.2	9.8	Go	3	..	15162b	79	473	35.4	+64 52	8.9	9.0	A2	2	..	37556i
30	1021	34.9	+47 24	7.8	8.8	Ko	3	..	38125i	80	831	35.4	+60 39	9.7	9.7	Ao	3	..	38907i
31	724	34.9	+23 45	9.1	9.4	F	1	R	38153i	81	733	35.4	+22 30	9.4	9.5	A5	1	..	38153i
32	688	34.9	+ 7 37	7.8	8.8	Ko	3	..	38083i	82	803	35.4	+20 24	9.8	10.6	G5	1	..	38153i
33	638	34.9	+ 3 8	8.8	8.9	A5	4	..	15135b	83	890	35.4	-18 18	8.7	9.0	F2	3	..	12407b
34	815	34.9	+ 0 22	8.6	8.6	Ao	4	..	38063i	84	902	35.4	-20 22	10.6	10.5	A	2	..	2381ob
35	898	34.9	- 4 17	8.9	9.5	Go	2	..	12685b	85	1932	35.4	-30 48	9.1	9.7	Ko	2	..	4108ob
36	938	34.9	-21 29	9.8	11.1	K	1	..	2381ob	86	1846	35.4	-37 31	7.7	9.5	K2	2	..	12287b
37	1652	34.9	-28 7	7.65	8.8	A3	7	..	17401b	87	1671	35.4	-38 22	9.44	9.2	F5	2	..	42916b
38	1837	34.9	-35 43	9.4	10.6	G5	1	..	4602ob	88	1502	35.4	-40 35	10.3	9.8	F5	2	..	20647b
39	1618	34.9	-45 51	9.7	10.7	Go	2	..	44376b	89	1501	35.4	-40 47	10.3	9.8	F8	3	2,1	20647b
40	679	34.9	-55 4	9.18	9.7	Go	3	..	41013b	90	1621	35.4	-45 36	9.9	11.1	K5	1	..	44376b
41	345	35.0	+68 38	9.4	9.5	A2	2	..	38165i	91	1447	35.4	-47 20	9.3	10.6	Ko	3	..	3840ob
42	344	35.0	+67 36	8.8	10.0	K5	1	..	38112i	92	1434	35.4	-48 47	9.7	9.8	F8	2	..	3840ob
43	834	35.0	+58 5	8.9	9.5	Go	1	..	38136i	93	1456	35.4	-50 1	9.29	10.1	G5	3	..	3840ob
44	872	35.0	+52 57	8.0	8.4	F5	3	..	37406i	94	832	35.5	+60 20	9.2	9.2	Ao	3	..	38907i
45	954	35.0	+38 5	5.82	6.24	F5	8	..	3726oi	95	957	35.5	+37 20	7.8	8.3	F8	6	..	38934i
46	680	35.0	+28 25	5.68	5.68	Ao	..	0,10	56,78	96	682	35.5	+28 29	8.8	9.3	F8	2	..	37387i
47	723	35.0	+25 50	8.4	8.4	B9	3	E	38153i	97	802	35.5	+20 43	9.0	10.1	K2	3	..	38153i
48	746	35.0	- 0 38	8.4	8.7	Fo	4	..	15135b	98	677	35.5	+18 31	9.1	9.7	Go	1	..	3892oi
49	977	35.0	-10 53	8.6	9.2	Go	4	..	12685b	99	701	35.5	+ 5 19	9.1	9.4	F2	2	..	15135b
50	832	35.0	-15 42	9.6	9.6	Ao	3	..	12407b	100	700	35.5	+ 5 7	8.61	8.61	Ao	6	..	15135b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29500

4^h 33^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	901	33.6	- 8 28	8.7	9.7	Ko	2	..	12685b	51	981	34.1	- 5 0	8.35	9.53	K5	3	..	12685b
2	939	33.6	-13 27	7.9	8.4	F8	4	..	8862b	52	954	34.1	- 5 58	9.2	10.0	G5	1	..	12685b
3	933	33.6	-14 30	3.98	4.08	Ko	..	5, R	28,110	53	864	34.1	- 7 35	8.9	9.9	Ko	1	..	12685b
4	921	33.6	-16 55	7.7	8.8	K2	4	..	12407b	54	903	34.1	- 8 25	7.7	7.7	B9	3	..	2298b
5	883	33.6	-18 0	7.73	8.73	Ko	7	E	23810b	55	978	34.1	-19 2	8.9	10.8	Ko	2	..	23810b
6	892	33.6	-20 53	7.10	6.5	B8	5	0,10	17429b	56	979	34.1	-19 50	7.03	7.2	A3	4	2,9	8862b
7	1806	33.6	-26 59	8.1	8.9	A2	7	..	17401b	57	2465	34.1	-24 52	8.55	9.1	B8	6	..	17401b
8	1642	33.6	-28 23	9.1	10.3	F8	2	..	17401b	58	1483	34.1	-40 44	9.7	10.4	Go	2	..	20647b
9	1496	33.6	-41 28	9.9	9.9	F5	1	..	20647b	59	1572	34.1	-42 5	6.59	7.0	A5	..	0,10	28,197
10	537	33.6	-52 1	9.2	9.8	F8	2	..	41013b	60	1389	34.1	-49 22	8.1	9.3	Ko	4	..	38400b
11	701	33.7	+62 35	9.0	10.0	Ko	2	..	38907i	61	796	34.2	+20 21	8.9	9.0	A2	2	..	38153i
12	680	33.7	+21 20	8.2	8.6	F5	4	..	38153i	62	637	34.2	+16 20	8.61	9.03	F5	4	..	6674m
13	686	33.7	- 1 4	8.8	9.9	K2	2	..	12390b	63	895	34.2	- 4 53	9.10	9.10	Ao	4	..	12685b
14	1918	33.7	-30 6	8.04	8.5	F5	6	3,5	17401b	64	973	34.2	-10 53	9.3	9.3	Ao	2	..	12685b
15	732	33.7	-53 27	8.7	10.4	Ko	2	..	41013b	65	1783	34.2	-34 6	9.4	10.4	Go	2	..	41080b
16	795	33.8	+54 28	8.0	8.0	Ao	4	..	37426i	66	1573	34.2	-42 15	9.0	9.5	A2	3	..	42090b
17	683	33.8	+ 7 48	7.8	8.6	G5	1	..	38083i	67	1575	34.2	-42 34	10.1	10.9	G5	2	..	42090b
18	810	33.8	+ 0 20	9.8	10.8	Ko	3	..	15135b	68	1499	34.2	-43 5	9.3	10.2	Ko	1	..	42090b
19	742	33.8	- 0 0	9.08	9.86	G5	2	..	15135b	69	1448	34.2	-50 21	9.9	10.2	G5	1	..	44376b
20	861	33.8	- 7 43	8.9	9.9	Ko	1	..	12685b	70	330	34.2	-67 30	9.4	9.9	F8	3	..	20430b
21	947	33.8	- 9 32	7.71	8.21	F8	6	..	12685b	71	769	34.3	+58 14	8.6	9.8	K5	1	3,1	38136i
22	933	33.8	-21 2	9.1	9.9	Go	2	..	23810b	72	763	34.3	+17 26	9.8	9.8	Ao	2	2,1	6674m
23	2062	33.8	-23 8	10.6	10.0	F8	2	..	23810b	73	955	34.3	-12 19	5.02	5.08	A2	..	2,10	56,78
24	1919	33.8	-30 40	9.5	9.1	Ko	2	..	46020b	74	942	34.3	-13 32	8.5	9.5	Ko	1	..	12378b
25	1419	33.8	-48 36	9.2	10.7	Ko	2	..	38400b	75	886	34.3	-18 52	8.7	9.1	F5	3	..	23810b
26	1128	33.9	+48 7	5.70	5.70	Ao	..	0,9	56,78	76	1770	34.3	-26 24	8.9	9.8	Fo	4	..	17401b
27	671	33.9	+18 22	9.5	9.5	Ao	2	..	6674m	77	1830	34.3	-35 44	10.1	10.4	A3	2	..	42916b
28	622	33.9	+12 57	8.9	9.9	Ko	2	..	38920i	78	685	34.3	-54 49	8.78	8.8	A5	5	..	41013b
29	789	33.9	+ 1 56	8.4	9.2	G5	2	..	38063i	79	162	34.4	+81 19	9.5	9.5	A	2	..	37558i
30	948	33.9	- 9 14	8.9	9.3	F5	2	..	12685b	80	1006	34.4	+44 19	8.0	8.0	B9	2	..	38088i
31	1609	33.9	-45 9	9.3	9.8	A3	4	..	44376b	81	704	34.4	+30 7	8.06	8.48	F5	5	..	37387i
32	678	33.9	-57 38	7.5	8.5	F8	5	..	42691b	82	744	34.4	+ 3 2	9.1	9.7	Go	3	..	15135b
33	273	33.9	-71 6	9.3	9.6	F2	3	0,4	20540b	83	743	34.4	- 0 17	7.63	8.63	Ko	4	..	38063i
34	767	34.0	+58 44	8.7	8.7	Ao	3	0,3	37426i	84	937	34.4	-21 36	9.1	10.0	F5	2	..	23810b
35	799	34.0	+53 24	8.4	9.4	Ko	3	..	37406i	85	1785	34.4	-34 19	7.7	8.7	G5	5	..	41080b
36	924	34.0	+36 41	8.25	8.33	A3	2	..	37260i	86	723	34.5	+61 35	10.2	11.6	Mb	..	..	M
37	728	34.0	+29 47	6.92	7.20	Fo	7	..	37387i	87	931	34.5	+41 57	7.29	7.85	Go	5	..	38088i
38	728	34.0	+22 49	8.8	8.9	A2	2	..	38153i	88	639	34.5	+16 12	9.5	10.0	F8	1	..	6674m
39	728	34.0	+ 4 33	8.8	10.0	K5	2	..	15135b	89	639	34.5	+12 0	5.37	5.35	B9	..	0,9	56,78
40	811	34.0	+ 0 7	8.88	9.95	K2	2	2,1	12390b	90	984	34.5	- 5 5	8.7	9.3	Go	4	..	12685b
41	934	34.0	-21 35	9.3	9.9	Ao	3	..	23810b	91	982	34.5	- 5 10	9.3	9.4	A2	3	..	12685b
42	1809	34.0	-27 28	7.84	10.0	K2	4	..	17401b	92	828	34.5	-15 9	9.1	9.7	Go	2	..	12378b
43	1938	34.0	-31 37	7.7	9.0	G5	4	..	41080b	93	981	34.5	-19 5	8.9	10.0	Ko	3	..	23810b
44	1836	34.0	-37 39	10.5	10.1	Ko	1	..	42916b	94	980	34.5	-19 11	9.6	10.0	Ao	3	..	23810b
45	1610	34.0	-45 3	9.5	10.4	Go	1	..	44376b	95	1951	34.5	-31 35	8.9	9.7	G5	2	..	41080b
46	353	34.0	-64 52	9.8	10.1	Fo	3	..	20430b	96	1490	34.5	-40 52	10.8	10.7	A5	1	..	20647b
47	303	34.0	-66 24	8.9	9.3	F5	6	..	20430b	97	539	34.5	-52 3	8.3	9.0	Go	4	..	41013b
48	121	34.1	+83 7	8.6	9.0	F5	4	..	37558i	98	91	34.5	-83 7	6.76	6.8	A2	10	..	20557b
49	345	34.1	+66 35	8.0	9.0	Ko	2	..	38112i	99	964	34.6	+57 1	8.0	8.5	F8	3	..	37426i
50	762	34.1	+17 17	8.0	9.0	Ko	5	5,2	6674m	100	1226	34.6	+49 44	7.62	7.62	Ao	4	..	37406i

THE HENRY DRAPER CATALOGUE.

29600

4^h 34^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	765	34.6	+17 56	8.6	9.4	G5	3	5,2	3892oi	51	985	35.0	-19 20	8.7	10.0	Ko	3	..	2381ob
2	732	34.6	+ 7 5	8.4	9.2	G5	3	..	38083i	52	1838	35.0	-35 30	8.8	9.0	F8	4	..	4108ob
3	982	34.6	-19 49	9.6	11.3	K	1	..	2381ob	53	1498	35.0	-40 47	9.1	9.2	G5	5	5,2	20647b
4	1954	34.6	-31 21	8.9	9.7	G5	3	..	4108ob	54	1432	35.0	-48 29	9.1	9.8	G5	3	..	3840ob
5	1613	34.6	-45 5	9.9	10.4	F5	1	..	44376b	55	1391	35.0	-49 25	10.6	10.4	Ko	2	..	44376b
6	826	34.7	+59 20	6.53	6.61	A3	7	0,7	37426i	56	702	35.0	-56 50	9.1	9.7	A3	2	..	42691b
7	932	34.7	+41 23	8.7	9.1	F5	1	..	38088i	57	681	35.0	-57 8	8.4	9.5	Ko	3	..	42691b
8	640	34.7	+16 20	9.37	10.37	Ko	1	..	6674m	58	274	35.0	-75 53	8.6	9.2	Go	8	..	15162b
9	733	34.7	+ 6 11	8.9	8.9	Ao	3	..	15135b	59	315	35.1	+70 16	9.5	9.6	A2	1	..	38112i
10	689	34.7	- 1 15	6.18	7.18	Ko	6	..	38063i	60	770	35.1	+58 22	8.6	9.0	F5	3	3,2	38136i
11	855	34.7	- 3 34	8.7	8.7	Ao	3	..	12685b	61	1023	35.1	+47 57	8.4	9.2	G5	1	..	38125i
12	950	34.7	- 9 8	9.1	9.7	Go	2	..	12685b	62	869	35.1	- 7 24	8.7	9.0	F2	3	..	12685b
13	936	34.7	-14 33	5.61	6.39	G5	6	..	8862b	63	937	35.1	-14 47	7.81	8.31	F8	2	..	8862b
14	896	34.7	-19 55	8.93	9.9	Go	3	..	2381ob	64	916	35.1	-16 45	8.9	9.7	G5	2	..	12407b
15	1816	34.7	-27 14	8.7	9.5	Go	4	..	17401b	65	1962	35.1	-31 25	8.1	8.8	F2	4	..	4108ob
16	1430	34.7	-48 22	10.3	10.7	F5	1	..	3840ob	66	1499	35.1	-40 25	9.1	9.5	F8	3	7,2 R	20647b
17	1452	34.7	-49 58	9.9	10.6	Fo	2	..	44376b	67	1644	35.1	-44 50	7.84	8.3	A5	6	..	41001b
18	541	34.7	-52 27	9.3	10.1	G5	1	..	41013b	68	345	35.2	+67 44	8.6	9.4	G5	2	..	38112i
19	270	34.8	+69 38	8.4	9.4	Ko	2	..	38112i	69	767	35.2	+17 55	10.5	10.5	A	1	..	6674m
20	900	34.8	+34 30	7.96	8.96	Ko	3	5,2	37387i	70	927	35.2	-17 9	7.83	9.01	K5	5	..	12407b
21	723	34.8	+23 38	8.8	9.6	G5	2	..	38153i	71	688	35.2	-54 52	9.5	10.0	F8	2	..	41013b
22	766	34.8	+17 12	8.9	9.9	Ko	1	5,1	3892oi	72	282	35.2	-69 17	9.2	9.5	Fo	4	..	2043ob
23	958	34.8	-12 43	8.6	9.2	Go	3	..	12378b	73	347	35.3	+66 46	9.2	9.2	Ao	2	..	38112i
24	913	34.8	-16 10	8.7	8.7	A	3	..	12378b	74	941	35.3	-21 26	7.18	8.4	G5	7	..	2381ob
25	2473	34.8	-23 58	9.9	10.3	F5	3	..	2381ob	75	1819	35.3	-36 23	8.9	10.1	K2	2	..	4108ob
26	1990	34.8	-25 54	7.30	9.1	Ko	7	..	17401b	76	542	35.3	-52 15	8.5	10.1	K2	1	..	41013b
27	1834	34.8	-35 23	10.8	11.3	G5	1	..	4108ob	77	543	35.3	-52 46	8.8	9.8	F5	2	..	41013b
28	1617	34.8	-44 59	8.70	9.8	Ko	2	..	41001b	78	189	35.4	+75 46	6.04	6.32	Fo	8	..	37558i
29	142	34.8	-78 27	9.2	9.8	Go	3	..	15162b	79	473	35.4	+64 52	8.9	9.0	A2	2	..	37556i
30	1021	34.9	+47 24	7.8	8.8	Ko	3	..	38125i	80	831	35.4	+60 39	9.7	9.7	Ao	3	..	38907i
31	724	34.9	+23 45	9.1	9.4	F	1	R	38153i	81	733	35.4	+22 30	9.4	9.5	A5	1	..	38153i
32	688	34.9	+ 7 37	7.8	8.8	Ko	3	..	38083i	82	803	35.4	+20 24	9.8	10.6	G5	1	..	38153i
33	638	34.9	+ 3 8	8.8	8.9	A5	4	..	15135b	83	890	35.4	-18 18	8.7	9.0	F2	3	..	12407b
34	815	34.9	+ 0 22	8.6	8.6	Ao	4	..	38063i	84	902	35.4	-20 22	10.6	10.5	A	2	..	2381ob
35	898	34.9	- 4 17	8.9	9.5	Go	2	..	12685b	85	1932	35.4	-30 48	9.1	9.7	Ko	2	..	4108ob
36	938	34.9	-21 29	9.8	11.1	K	1	..	2381ob	86	1846	35.4	-37 31	7.7	9.5	K2	2	..	12287b
37	1652	34.9	-28 7	7.65	8.8	A3	7	..	17401b	87	1671	35.4	-38 22	9.44	9.2	F5	2	..	42916b
38	1837	34.9	-35 43	9.4	10.6	G5	1	..	46020b	88	1502	35.4	-40 35	10.3	9.8	F5	2	..	20647b
39	1618	34.9	-45 51	9.7	10.7	Go	2	..	44376b	89	1501	35.4	-40 47	10.3	9.8	F8	3	2,1	20647b
40	679	34.9	-55 4	9.18	9.7	Go	3	..	41013b	90	1621	35.4	-45 36	9.9	11.1	K5	1	..	44376b
41	345	35.0	+68 38	9.4	9.5	A2	2	..	38165i	91	1447	35.4	-47 20	9.3	10.6	Ko	3	..	3840ob
42	344	35.0	+67 36	8.8	10.0	K5	1	..	38112i	92	1434	35.4	-48 47	9.7	9.8	F8	2	..	3840ob
43	834	35.0	+58 5	8.9	9.5	Go	1	..	38136i	93	1456	35.4	-50 1	9.29	10.1	G5	3	..	3840ob
44	872	35.0	+52 57	8.0	8.4	F5	3	..	37406i	94	832	35.5	+60 20	9.2	9.2	Ao	3	..	38907i
45	954	35.0	+38 5	5.82	6.24	F5	8	..	3726oi	95	957	35.5	+37 20	7.8	8.3	F8	6	..	38934i
46	680	35.0	+28 25	5.68	5.68	Ao	..	0,10	56,78	96	682	35.5	+28 29	8.8	9.3	F8	2	..	37387i
47	723	35.0	+25 50	8.4	8.4	B9	3	E	38153i	97	802	35.5	+20 43	9.0	10.1	K2	3	..	38153i
48	746	35.0	- 0 38	8.4	8.7	Fo	4	..	15135b	98	677	35.5	+18 31	9.1	9.7	Go	1	..	3892oi
49	977	35.0	-10 53	8.6	9.2	Go	4	..	12685b	99	701	35.5	+ 5 19	9.1	9.4	F2	2	..	15135b
50	832	35.0	-15 42	9.6	9.6	Ao	3	..	12407b	100	700	35.5	+ 5 7	8.61	8.61	Ao	6	..	15135b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29700

4^h 35^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	919	35.5	-16 46	9.6	9.6	A	1	..	12407b	51	269	36.0	-73 25	6.72	8.0	Ko	8	..	15162b
2	903	35.5	-20 5	9.3	9.9	Go	2	..	23810b	52	679	36.1	+18 39	9.1	9.9	G5	1	..	38920i
3	904	35.5	-20 15	10.0	10.6	A	2	..	23810b	53	643	36.1	+ 3 29	8.4	8.5	A5	4	..	38063i
4	1934	35.5	-30 39	8.5	9.4	Mb	2	..	41080b	54	983	36.1	-10 15	9.3	9.9	Go	1	..	12685b
5	1503	35.5	-40 45	10.5	9.8	F5	2	..	20647b	55	988	36.1	-19 52	4.54	6.5	Ma	9	0,10	17429b
6	331	35.5	-67 7	8.8	9.8	Ko	4	..	20430b	56	1666	36.1	-28 44	9.9	10.7	Ko	1	..	17401b
7	236	35.6	+72 58	8.6	8.7	A2	2	..	37630i	57	1939	36.1	-30 0	9.2	9.7	F5	3	..	17401b
8	692	35.6	- 1 24	8.4	8.8	F5	2	..	38063i	58	1851	36.1	-35 22	8.6	9.0	F5	4	..	41080b
9	947	35.6	-13 12	8.3	8.6	Fo	5	..	12378b	59	409	36.1	-58 38	9.2	9.5	F5	2	..	42691b
10	1661	35.6	-28 24	9.9	9.7	Ao	4	..	17401b	60	316	36.2	+71 3	9.4	9.9	F8	2	..	38165i
11	1858	35.6	-33 38	7.7	8.2	F5	5	..	41080b	61	727	36.2	+61 30	8.7	9.9	K5	2	..	38907i
12	372	35.6	-62 16	var.	var.	Mc	10	R	20430b	62	827	36.2	+59 41	9.2	9.2	Ao	3	..	38907i
13	271	35.7	+69 54	8.84	9.84	Ko	2	..	38165i	63	739	36.2	+22 46	4.33	4.21	B5	..	R	56,78
14	734	35.7	+22 26	9.4	10.0	G	2	R	38153i	64	704	36.2	+ 5 22	9.1	9.6	F8	1	..	15135b
15	667	35.7	+15 20	9.8	10.4	Go	2	..	6674m	65	876	36.2	- 6 56	7.17	8.17	Ko	6	..	12685b
16	735	35.7	+14 39	8.64	9.06	F5	4	3,3	6674m	66	1831	36.2	-27 56	8.7	9.7	A2	4	..	17401b
17	747	35.7	+ 2 19	7.8	8.1	Fo	4	..	38063i	67	1852	36.2	-35 51	8.5	8.7	F5	5	..	41080b
18	1794	35.7	-34 12	7.64	8.6	G5	5	..	41080b	68	1454	36.2	-47 55	9.1	9.5	F8	4	..	38400b
19	1504	35.7	-40 9	9.5	9.2	A3	4	2,2	20647b	69	311	36.2	-72 56	6.98	7.2	A2	9	..	15162b
20	917	35.8	+55 21	8.6	8.6	B9	2	..	37426i	70	49	36.2	-88 5	9.2	9.5	Fo	3	..	15145b
21	1230	35.8	+49 48	5.77	5.72	B8	8	..	37406i	71	1025	36.3	+48 0	8.0	8.1	A2	3	..	37406i
22	1043	35.8	+43 10	5.25	5.25	Ao	10	..	38088i	72	798	36.3	+ 1 43	8.6	9.4	G5	1	..	38063i
23	926	35.8	+38 12	8.6	8.6	Ao	3	R	38934i	73	819	36.3	+ 0 38	8.6	9.4	G5	2	..	38063i
24	897	35.8	+35 40	8.75	8.81	A2	2	..	38934i	74	1439	36.3	-48 9	9.7	9.8	Fo	2	..	38400b
25	759	35.8	+19 54	9.1	9.9	G5	1	..	38153i	75	272	36.4	+70 4	8.39	9.39	Ko	2	..	38112i
26	768	35.8	+17 14	8.3	8.4	A2	4	..	38920i	76	680	36.4	+18 10	9.1	10.1	Ko	1	..	38920i
27	641	35.8	+16 32	8.2	8.3	A2	3	..	38920i	77	642	36.4	+16 30	9.8	10.8	Ko	1	..	6674m
28	817	35.8	+ 0 47	7.8	7.8	Ao	7	..	38063i	78	736	36.4	+14 9	8.4	8.5	A2	5	0,3	6674m
29	980	35.8	-10 49	9.1	10.1	Ko	2	..	12685b	79	1923	36.4	-32 14	9.5	10.6	Ko	1	..	46020b
30	878	35.8	-22 48	8.1	8.6	Ao	5	..	23810b	80	1205	36.4	-51 39	9.0	9.8	G5	3	..	41013b
31	1823	35.8	-27 33	10.4	10.3	A2	1	..	17401b	81	410	36.4	-58 24	6.63	8.0	G5	8	..	42691b
32	1825	35.8	-27 51	9.4	10.0	F5	2	..	17401b	82	174	36.4	-77 41	9.0	9.8	G5	4	..	15162b
33	891	35.9	+33 47	8.2	8.2	Ao	2	..	38934i	83	145	36.4	-78 50	7.2	7.3	A2	8	..	15162b
34	640	35.9	+ 3 20	8.4	9.4	Ko	2	..	38063i	84	836	36.5	+57 36	9.2	9.2	Ao	2	0,2	38136i
35	982	35.9	- 2 8	8.1	8.9	G5	2	..	38063i	85	892	36.5	+33 46	7.50	8.50	Ko	5	5,4	37387i
36	857	35.9	- 3 42	8.16	9.16	Ko	4	0,3	12685b	86	669	36.5	+15 47	7.8	8.1	F2	3	..	37544i
37	2488	35.9	-24 41	5.59	7.5	Ko	..	..	56,120	87	799	36.5	+ 1 6	9.04	10.11	K2	1	..	15135b
38	270	35.9	-68 26	9.3	9.8	F8	3	..	20430b	88	821	36.5	+ 0 22	8.0	8.0	B9	5	..	38063i
39	249	36.0	+73 17	9.2	9.3	A2	3	..	38165i	89	697	36.5	- 0 57	8.4	8.7	F2	4	..	38063i
40	348	36.0	+67 2	8.7	9.7	Ko	2	..	38112i	90	1787	36.5	-25 58	8.0	9.2	Fo	6	..	17401b
41	532	36.0	+63 29	9.4	9.4	Ao	3	..	38907i	91	1786	36.5	-26 16	8.3	10.3	Ko	2	..	17401b
42	927	36.0	+38 14	6.72	6.86	A5	6	..	37260i	92	1830	36.5	-29 46	8.9	10.1	F5	4	..	17401b
43	926	36.0	+36 7	7.75	7.73	B9	5	..	38934i	93	1857	36.5	-35 13	8.0	9.2	Ko	4	..	41080b
44	683	36.0	+28 24	9.0	9.6	G	1	..	37387i	94	307	36.5	-66 38	9.5	9.5	Ao	5	..	20430b
45	729	36.0	+23 51	7.02	7.44	F5	7	..	38153i	95	333	36.5	-67 26	9.1	9.9	G5	5	..	20430b
46	982	36.0	-10 42	9.1	9.6	F8	2	..	12685b	96	702	36.6	+63 4	7.7	8.5	G5	3	..	37556i
47	928	36.0	-17 52	8.7	9.9	K5	3	..	12407b	97	729	36.6	+61 32	8.9	8.9	Ao	3	..	38136i
48	906	36.0	-20 41	9.1	10.3	K2	2	..	23810b	98	806	36.6	+53 30	8.9	8.9	A	2	..	38970i
49	1511	36.0	-41 55	9.2	9.8	Ko	2	..	42090b	99	822	36.6	+ 0 59	9.3	10.4	K2	2	..	15135b
50	1488	36.0	-46 48	9.7	10.7	G5	2	..	38400b	100	2091	36.6	-23 14	8.5	9.6	Ko	3	..	23810b

THE HENRY DRAPER CATALOGUE.

29800

4^h 36^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1832	36.6	-27 39	9.5	10.3	Go	2	..	17401b	51	969	37.1	-12 40	6.62	6.68	A2	..	2,7	56,78
2	1514	36.6	-43 35	8.3	9.2	F5	4	..	42090b	52	2097	37.1	-23 47	10.2	9.9	G5	2	..	23810b
3	1627	36.6	-45 19	8.6	9.5	K2	3	..	42090b	53	1867	37.1	-33 15	9.1	10.0	Ko	2	0,2	41080b
4	1458	36.6	-50 40	8.6	9.3	Fo	5	..	38400b	54	689	37.1	-54 22	8.1	9.7	Ko	3	..	41013b
5	1207	36.6	-51 52	6.38	8.3	Ko	8	..	41013b	55	704	37.1	-56 21	8.7	9.8	F5	2	..	20264b
6	918	36.7	+55 53	8.8	9.1	Fo	2	..	38970i	56	368	37.1	-59 1	9.5	10.1	Go	2	..	42691b
7	643	36.7	+16 26	10.5	11.0	F8	2	..	6674m	57	834	37.2	+60 44	9.4	10.4	Ko	2	..	38136i
8	740	36.7	+8 39	8.4	8.4	Ao	3	..	38083i	58	807	37.2	+53 18	9.2	9.2	A	1	..	38970i
9	750	36.7	-0 10	9.8	9.9	A2	2	..	12390b	59	733	37.2	+23 55	6.18	6.74	Go	9	..	38153i
10	988	36.7	-2 20	8.7	8.7	Ao	2	..	38063i	60	808	37.2	+20 27	8.6	9.2	Go	3	..	38153i
11	914	36.7	-8 23	8.2	9.3	K2	2	..	12685b	61	774	37.2	+17 7	8.2	9.4	K5	1	..	38920i
12	942	36.7	-14 8	8.7	9.7	Ko	3	..	12378b	62	643	37.2	+12 0	7.6	8.4	G5	4	..	37544i
13	1674	36.7	-28 23	7.65	8.9	Go	7	..	17401b	63	645	37.2	+3 52	8.8	9.6	G5	2	..	15135b
14	1629	36.7	-45 15	7.9	9.0	F8	6	..	42090b	64	862	37.2	-3 39	9.1	10.1	Ko	1	..	12685b
15	357	36.7	-64 19	9.5	10.1	Go	3	..	20430b	65	1209	37.2	-51 51	9.9	10.1	G	1	..	41013b
16	534	36.8	+63 50	9.2	10.4	K5	1	..	38907i	66	1032	37.3	+40 36	6.10	5.98	B5	8	..	37260i
17	829	36.8	+59 42	8.2	8.5	Fo	6	2,4-	38907i	67	827	37.3	+32 41	6.45	6.53	A3	6	2,7-	10405i
18	903	36.8	+46 47	8.6	9.4	G5	2	..	38125i	68	645	37.3	+16 7	8.4	8.8	F5	4	5,2	6674m
19	628	36.8	+9 27	6.85	7.19	F2	7	..	38083i	69	738	37.3	+14 37	6.77	7.55	G5	4	..	37544i
20	707	36.8	+5 36	9.1	10.1	Ko	2	..	15135b	70	702	37.3	-1 7	6.82	7.10	Fo	7	..	38063i
21	731	36.8	+4 16	8.8	9.8	Ko	2	..	38083i	71	938	37.3	-11 47	8.5	8.6	A3	4	..	12685b
22	897	36.8	-18 15	10.0	10.6	G	2	..	12407b	72	2510	37.3	-24 10	7.51	9.7	Ma	4	..	23810b
23	882	36.8	-22 35	9.2	10.3	G5	2	..	23810b	73	1932	37.3	-32 24	8.8	9.5	Ko	2	..	41080b
24	1583	36.8	-39 0	7.42	8.3	Ko	4	..	12287b	74	1518	37.3	-40 37	9.4	9.6	A2	3	1,2-	20647b
25	684	36.8	-56 58	8.3	9.7	Ko	3	..	42691b	75	1587	37.3	-42 3	4.52	4.86	F2	..	R	28,197
26	475	36.9	+64 38	7.02	7.80	G5	4	0,3	36654i	76	1495	37.3	-46 29	8.5	9.3	Go	5	..	38400b
27	1028	36.9	+48 0	6.97	7.97	Ko	4	..	37406i	77	369	37.3	-59 10	7.7	7.7	A2	8	..	42691b
28	1032	36.9	+42 59	9.0	9.0	A	1	..	38152i	78	309	37.3	-66 19	9.3	9.8	F8	4	..	20430b
29	772	36.9	+17 41	9.8	9.8	Ao	1	..	6674m	79	310	37.3	-66 39	9.1	9.5	F5	5	..	20430b
30	125	37.0	+83 1	8.6	8.6	B9	6	..	37558i	80	312	37.3	-72 9	9.1	9.9	G5	2	..	20540b
31	176	37.0	+77 2	8.9	8.9	Ao	2	..	37558i	81	49	37.3	-86 25	8.3	8.9	Go	5	..	15145b
32	773	37.0	+58 11	8.5	9.3	G5	3	5,3	38970i	82	1013	37.4	+44 34	7.77	7.91	A5	5	..	38088i
33	1033	37.0	+42 14	7.40	7.38	B9	4	..	38088i	83	688	37.4	+27 29	8.0	9.0	Ko	3	..	37387i
34	824	37.0	+33 3	8.5	8.8	F2	2	..	38934i	84	670	37.4	+15 18	8.14	8.28	A5	2	..	37544i
35	725	37.0	+26 3	8.6	9.8	K5	1	E	38153i	85	733	37.4	+4 37	9.5	10.5	Ko	1	..	15135b
36	684	37.0	+18 32	7.12	7.90	G5	5	..	37544i	86	800	37.4	+1 15	9.19	10.19	Ko	2	..	15135b
37	631	37.0	+12 8	8.0	8.1	A5	3	..	38920i	87	948	37.4	-21 34	8.9	10.0	G5	2	..	23810b
38	644	37.0	+3 36	8.6	8.6	Ao	5	..	38063i	88	1872	37.4	-33 41	8.5	10.1	Ko	1	..	46020b
39	751	37.0	+2 48	7.8	7.8	Ao	7	..	38063i	89	1520	37.4	-40 2	7.85	8.9	A	7	R	12287b
40	963	37.0	-6 24	9.1	9.5	F5	4	..	12685b	90	1521	37.4	-40 3	8.6	8.6	A5	7	..	12287b
41	943	37.0	-14 53	7.41	8.19	G5	2	..	8862b	91	1655	37.4	-44 56	9.50	9.8	A5	2	..	42090b
42	995	37.0	-19 39	9.1	9.6	Fo	4	..	12407b	92	346	37.5	+68 28	9.2	9.3	A3	2	..	38165i
43	1833	37.0	-29 35	8.5	8.8	Go	4	..	17401b	93	969	37.5	+57 0	8.5	9.0	F8	4	0,3-	38970i
44	..	37.0	-38 26	var.	var.	Md	..	R	56,199	94	808	37.5	+53 28	9.2	9.2	A	1	..	38970i
45	411	37.0	-58 39	8.9	9.6	Ko	2	..	42691b	95	688	37.5	+18 26	9.1	9.1	Ao	3	..	38920i
46	876	37.1	+52 9	7.83	7.71	B5	7	..	37406i	96	646	37.5	+16 52	10.5	11.5	Ko	2	..	6674m
47	927	37.1	+36 53	8.1	9.3	K5	1	..	38934i	97	697	37.5	+7 23	8.4	8.5	A2	3	..	38083i
48	644	37.1	+16 52	9.8	10.9	K2	1	..	6674m	98	735	37.5	+4 13	8.9	9.3	F5	3	..	15135b
49	710	37.1	+5 47	8.8	9.6	G5	3	..	15135b	99	685	37.5	-57 5	8.0	9.4	K2	3	..	42691b
50	700	37.1	-1 52	8.77	8.83	A2	3	..	38063i	100	906	37.6	+46 12	9.4	9.4	A	1	..	38125i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

29900

4^h 37^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	900	37.6	+36 0	8.0	9.2	K5	1	..	38934i	51	1034	38.1	+47 17	7.32	8.10	G5	4	..	37406i
2	970	37.6	-12 21	9.1	10.1	Ko	3	..	24605b	52	738	38.1	+ 5 4	8.01	8.01	Ao	6	..	38083i
3	1837	37.6	-29 15	9.9	9.4	Go	2	..	17401b	53	1820	38.1	-34 54	9.96	11.3	G5	1	..	46020b
4	1590	37.6	-39 46	7.98	8.0	F5	6	0,6	12287b	54	1641	38.1	-45 54	8.4	9.0	A5	6	..	38400b
5	1499	37.6	-46 42	9.9	10.7	K2	1	..	38400b	55	147	38.1	-78 34	8.4	8.4	Ao	6	..	15162b
6	548	37.6	-52 35	9.2	10.6	Mb	..	..	M	56	1035	38.2	+47 31	8.9	9.3	F5	2	..	38125i
7	361	37.6	-65 39	9.6	10.2	Go	2	..	20430b	57	1047	38.2	+43 36	7.92	9.10	K5	2	..	38088i
8	155	37.7	+79 30	8.5	9.0	F8	3	..	37558i	58	690	38.2	+18 17	8.6	8.6	Ao	3	..	6674m
9	320	37.7	+70 21	8.2	9.0	G5	4	..	38112i	59	740	38.2	+ 4 47	8.2	8.3	A2	5	..	38083i
10	1034	37.7	+43 1	8.6	9.4	G5	1	0,5 R	38152i	60	706	38.2	- 1 29	8.8	8.8	Ao	3	..	14949b
11	1054	37.7	+39 41	8.4	8.7	F2	3	..	38152i	61	953	38.2	-21 10	7.63	8.4	F5	3	R	17429b
12	933	37.7	+38 32	8.4	8.5	A2	3	..	38934i	62	..	38.2	-21 10	..	..	A3	..	..	..
13	736	37.7	+ 4 32	8.6	9.6	Ko	3	..	38083i	63	2106	38.2	-23 22	7.04	8.4	K5	6	..	23810b
14	753	37.7	+ 2 13	8.4	9.4	Ko	3	..	38063i	64	1844	38.2	-29 49	8.54	8.8	F5	4	E	20533b
15	968	37.7	- 6 15	9.3	9.3	Ao	2	..	12685b	65	1870	38.2	-35 18	9.5	10.1	Go	2	..	41080b
16	1953	37.7	-30 39	8.9	9.7	A5	2	E	41080b	66	1592	38.2	-42 33	9.3	9.8	Fo	3	..	20647b
17	1985	37.7	-31 0	8.9	9.4	Go	2	..	46020b	67	836	38.3	+60 7	9.04	9.82	G5	2	..	38907i
18	1816	37.7	-34 43	9.4	11.5	F8	1	..	46020b	68	809	38.3	+54 37	8.4	8.7	F2	3	..	37426i
19	1589	37.7	-42 41	8.9	8.6	F2	5	..	42090b	69	738	38.3	+23 53	8.4	9.0	Go	3	..	38153i
20	376	37.7	-62 34	6.5	6.6	A2	9	E	20430b	70	1007	38.3	- 4 57	9.10	10.28	K5	1	..	12685b
21	275	37.7	-71 53	8.6	8.9	Fo	4	..	20540b	71	970	38.3	- 6 39	7.9	7.9	Ao	3	0,7	2298b
22	276	37.7	-75 52	9.6	9.6	Ao	3	..	46167b	72	882	38.3	- 7 36	8.7	8.8	A2	4	..	12685b
23	962	37.8	+38 3	6.80	7.36	Go	6	..	37260i	73	1865	38.3	-37 23	8.1	9.9	K5	2	..	12287b
24	635	37.8	+12 51	8.8	9.6	G5	2	..	38920i	74	706	38.3	-56 23	9.7	9.8	A3	2	..	42691b
25	830	37.8	+ 0 56	7.99	7.97	B9	4	..	38063i	75	321	38.4	+70 17	8.6	9.2	Go	2	..	38112i
26	969	37.8	- 5 57	7.06	7.06	Ao	4	0,8	2298b	76	692	38.4	+21 28	8.6	8.7	A2	5	..	38153i
27	887	37.8	-22 48	9.1	10.3	K2	2	..	23810b	77	638	38.4	+12 48	7.8	8.2	F5	4	..	37544i
28	1792	37.8	-26 38	9.2	10.0	A2	4	2,3	17401b	78	708	38.4	- 1 17	8.4	9.6	K5	2	..	14949b
29	1501	37.8	-45 59	7.3	8.3	A2	9	..	38400b	79	971	38.4	- 5 56	8.8	9.1	Fo	3	..	12685b
30	1454	37.8	-48 44	7.03	8.0	G5	7	..	38400b	80	968	38.4	- 9 49	8.11	8.89	G5	4	..	12685b
31	146	37.8	-78 20	9.6	11.0	Ma	1	..	15162b	81	902	38.4	-18 1	8.9	9.0	A3	5	..	12407b
32	347	37.9	+69 1	9.5	9.5	A	1	..	38165i	82	903	38.4	-18 9	9.1	9.4	F2	5	..	12407b
33	427	37.9	+65 36	8.9	10.0	K2	2	..	38907i	83	891	38.4	-22 2	9.3	10.2	G5	2	..	23810b
34	1235	37.9	+49 22	8.5	8.5	Ao	3	..	37406i	84	1847	38.4	-29 54	8.99	9.7	G5	3	E	20533b
35	743	37.9	+22 45	8.0	8.0	B9	9	..	38153i	85	1822	38.4	-34 6	10.1	12.0	K2	1	..	46020b
36	758	37.9	- 0 47	7.8	8.6	G5	3	..	38063i	86	1595	38.4	-42 19	9.3	9.6	Fo	3	..	20647b
37	864	37.9	- 3 31	8.6	9.6	Ko	2	0,2	12685b	87	1659	38.4	-44 5	8.1	9.8	G5	4	..	42090b
38	922	37.9	- 4 19	8.1	8.2	A2	6	1,3	12685b	88	552	38.4	-52 16	8.9	9.5	Go	4	..	41013b
39	964	37.9	- 9 0	8.7	9.7	Ko	1	..	12685b	89	742	38.5	+ 4 33	8.8	9.3	F8	3	..	15135b
40	1934	37.9	-32 47	9.1	10.1	Ko	1	..	46020b	90	741	38.5	+ 4 21	9.5	9.5	Ao	5	..	15135b
41	1875	37.9	-33 2	8.1	8.5	Go	4	..	41080b	91	1877	38.5	-35 40	8.8	9.0	Go	4	..	41080b
42	738	37.9	-53 9	9.9	10.3	F5	2	..	41013b	92	1867	38.5	-37 20	5.08	5.50	F5	..	R	28,197
43	362	37.9	-65 17	9.1	10.1	Ko	3	..	20430b	93	1522	38.5	-43 12	9.3	9.5	F5	2	..	42090b
44	65	38.0	+86 43	8.4	9.2	G5	4	..	37546i	94	284	38.5	-69 0	7.7	7.7	Ao	8	..	20430b
45	877	38.0	+52 36	8.6	8.6	B8	3	1,3	37426i	95	275	38.6	+71 33	8.7	9.5	G5	1	..	38112i
46	312	38.0	-70 16	9.3	9.3	Ao	4	0,2	20430b	96	1237	38.6	+49 45	8.5	9.5	Ko	3	..	38125i
47	284	38.0	-76 18	9.2	9.8	G	2	..	15162b	97	907	38.6	+46 47	8.9	8.9	B8	2	E	37406i
48	273	38.1	+69 36	8.2	8.2	Ao	3	..	38112i	98	904	38.6	+34 58	7.87	8.21	F2	4	..	37260i
49	347	38.1	+67 35	6.97	7.25	Fo	7	..	38952i	99	652	38.6	+ 3 17	8.6	9.6	Ko	2	..	38063i
50	922	38.1	+55 28	7.56	8.56	Ko	3	..	37426i	100	804	38.6	+ 1 43	9.1	9.7	Go	3	..	15135b

THE HENRY DRAPER CATALOGUE.

30000

4^h 38^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	848	38.6	-15 49	8.0	9.2	K5	2	..	12378b	51	2115	39.0	-23 49	7.10	7.5	F2	8	..	23810b
2	918	38.6	-19 59	9.73	9.9	F5	2	..	23810b	52	1538	39.0	-41 30	8.8	9.8	Ko	2	..	42090b
3	370	38.6	-59 8	6.38	7.1	Go	8	..	42691b	53	555	39.0	-52 48	7.5	8.6	F5	6	..	41013b
4	1049	38.7	+43 12	8.7	8.7	B8	3	..	38088i	54	124	39.0	-80 29	8.0	9.0	Ko	3	..	20557b
5	672	38.7	+15 53	9.1	10.2	K2	2	..	6674m	55	172	39.1	+77 24	7.8	7.8	Ao	7	..	37558i
6	641	38.7	+12 58	8.6	9.4	G5	2	..	3892oi	56	973	39.1	+51 50	8.1	8.6	F8	3	..	3897oi
7	805	38.7	+1 11	8.87	9.37	F8	4	..	15135b	57	869	39.1	-3 21	8.1	9.1	Ko	4	0,4	12685b
8	832	38.7	+0 49	8.8	8.8	Ao	5	..	15135b	58	994	39.1	-10 20	8.7	9.8	K2	1	..	12685b
9	1010	38.7	-5 38	9.8	10.2	F5	1	..	12685b	59	973	39.1	-12 29	9.1	9.9	G5	4	..	24605b
10	895	38.7	-22 25	8.7	10.0	Ko	3	..	23810b	60	1997	39.1	-31 54	7.35	7.9	Fo	6	..	41080b
11	1869	38.7	-37 48	6.88	6.6	Ao	8	..	42916b	61	1884	39.1	-33 56	10.1	10.3	Go	1	..	46020b
12	1645	38.7	-45 30	8.0	8.3	Ao	8	..	38400b	62	1830	39.1	-34 24	7.67	8.6	Ko	6	..	41080b
13	364	38.7	-65 28	9.1	9.9	G5	4	..	20430b	63	1828	39.1	-34 48	9.65	10.4	Go	3	..	46020b
14	285	38.7	-76 18	9.0	9.8	G5	3	..	15162b	64	1539	39.1	-41 55	9.1	10.1	Ko	1	..	42090b
15	1051	38.8	+50 54	7.7	8.8	K2	2	..	38125i	65	1469	39.1	-48 1	7.2	7.9	Fo	8	..	38400b
16	964	38.8	+37 33	9.0	9.3	Fo	2	..	38934i	66	312	39.1	-66 13	9.3	9.9	Go	3	..	20430b
17	830	38.8	+32 44	8.8	10.2	Ma	1	..	37387i	67	683	39.2	+24 13	9.0	9.1	A2	2	..	38153i
18	928	38.8	-4 29	8.6	8.7	A3	3	2,3	12685b	68	1000	39.2	-2 14	9.3	9.3	Ao	2	..	14949b
19	1011	38.8	-5 19	9.1	9.6	F8	2	..	12685b	69	945	39.2	-11 23	9.3	10.3	Ko	3	..	24605b
20	969	38.8	-8 59	6.75	7.17	F5	4	R	2298b	70	1886	39.2	-33 37	8.3	8.6	F8	4	..	41080b
21	970	38.8	-8 59	6.67	7.09	F5	4	R	2298b	71	1882	39.2	-35 47	8.1	9.9	K2	2	..	41080b
22	896	38.8	-22 31	8.3	8.7	Go	5	..	23810b	72	1664	39.2	-44 41	9.0	9.5	Fo	3	..	42090b
23	2529	38.8	-24 29	7.6	8.4	Fo	8	..	23810b	73	365	39.2	-65 51	8.6	9.6	Ko	6	..	20430b
24	1857	38.8	-27 13	8.9	10.0	Ko	3	0,3	17401b	74	704	39.3	+62 28	9.0	10.2	K5	1	..	38907i
25	1941	38.8	-32 40	9.5	9.4	Fo	2	..	41080b	75	910	39.3	+46 54	8.6	9.4	G5	2	E	37406i
26	1703	38.8	-38 44	8.76	8.9	A3	5	1,3	20647b	76	929	39.3	-8 41	5.87	5.75	B5	7	..	2298b
27	1663	38.8	-44 53	9.0	10.4	Ko	1	..	42090b	77	947	39.3	-10 55	10.0	10.4	F5	2	..	24605b
28	1220	38.8	-51 38	9.5	10.4	G5	1	..	41013b	78	958	39.3	-20 55	9.1	9.3	Fo	2	..	17402b
29	694	38.8	-54 4	9.1	9.7	Fo	2	..	41013b	79	957	39.3	-20 59	9.1	9.3	Ao	6	..	23810b
30	707	38.8	-56 13	7.5	8.1	Fo	7	..	42691b	80	1968	39.3	-30 57	5.73	7.4	Ko	..	..	56,120
31	314	38.8	-72 40	8.1	9.2	K2	4	E	15162b	81	1601	39.3	-39 2	8.1	9.2	Ko	3	0,2	20647b
32	175	38.8	-77 3	8.6	9.6	Ko	4	..	15162b	82	557	39.3	-52 30	8.1	8.7	Fo	7	..	41013b
33	1037	38.9	+47 33	9.4	9.5	A5	1	..	38125i	83	286	39.3	-69 39	8.5	9.6	K2	4	3,2	20430b
34	621	38.9	+10 58	5.35	5.43	A3	9	E	37544i	84	298	39.3	-74 2	8.3	9.3	Ko	5	..	15162b
35	756	38.9	+2 13	9.1	10.2	K2	2	..	15135b	85	322	39.4	+70 45	6.39	6.37	B9	9	1,8-	38165i
36	809	38.9	+1 54	9.8	10.3	F8	2	R	38183i	86	323	39.4	+70 9	9.9	10.7	G5	1	..	38112i
37	810	38.9	+1 49	8.8	9.8	K	2	..	15135b	87	351	39.4	+66 50	8.6	8.6	Ao	3	..	38112i
38	2530	38.9	-24 2	8.7	10.3	K2	2	..	23810b	88	926	39.4	+55 25	9.2	9.2	Ao	2	..	3897oi
39	1801	38.9	-26 26	8.9	10.0	Fo	4	0,3	17401b	89	1039	39.4	+47 35	9.4	9.5	A2	2	..	38125i
40	1535	38.9	-41 14	9.7	10.9	K2	2	..	20647b	90	1045	39.4	+42 9	6.65	7.21	Go	6	..	38088i
41	1646	38.9	-45 6	8.50	9.2	Fo	4	..	42090b	91	1013	39.4	-5 51	10.0	10.4	F5	1	..	12685b
42	1472	38.9	-47 27	6.60	7.8	Go	8	..	38400b	92	951	39.4	-14 39	8.5	9.6	K2	2	..	12407b
43	1466	38.9	-48 21	8.3	9.5	G5	3	..	38400b	93	959	39.4	-21 38	8.8	9.9	F8	5	..	23810b
44	1467	38.9	-48 41	9.0	10.1	K2	2	..	44376b	94	1886	39.4	-35 2	8.5	9.5	Ko	3	..	41080b
45	696	38.9	-54 53	9.5	10.0	F8	2	..	41013b	95	1468	39.4	-50 43	8.1	8.9	G5	4	..	38400b
46	1239	39.0	+49 58	8.37	8.37	Ao	3	..	37406i	96	168	39.5	+81 28	8.6	8.9	Fo	5	..	37558i
47	745	39.0	+14 27	7.8	8.4	Go	2	..	37544i	97	193	39.5	+75 32	7.17	7.95	G5	5	..	37558i
48	711	39.0	+13 29	9.8	9.9	A5	2	..	3892oi	98	976	39.5	+51 27	8.9	8.9	Ao	2	..	38125i
49	886	39.0	-7 14	9.2	9.2	Ao	3	..	12685b	99	936	39.5	+39 3	8.6	9.8	K5	1	..	38934i
50	993	39.0	-10 53	var.	var.	A5	5	R	12378b	100	719	39.5	+5 23	9.8	9.8	Ao	3	..	15135b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

30100

4^h 39^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	718	39.5	+ 5 7	8.16	8.94	G5	3	..	38083i	51	818	40.0	+ 54 38	8.9	8.9	Ao	3	..	3897oi
2	658	39.5	+ 3 48	8.4	9.6	K5	2	..	38083i	52	956	40.0	+ 41 7	7.02	7.02	Ao	6	..	3726oi
3	758	39.5	+ 3 1	8.4	8.4	Ao	4	..	38063i	53	711	40.0	+ 7 24	8.8	9.4	Go	2	..	38083i
4	961	39.5	-13 9	8.7	9.7	Ko	4	..	24605b	54	759	40.0	+ 2 36	9.1	9.2	A2	6	..	15135b
5	923	39.5	-20 33	7.63	8.4	G5	7	..	2381ob	55	982	40.0	- 5 55	9.3	9.6	Fo	2	..	12685b
6	1670	39.5	-44 50	9.04	9.5	F8	3	..	4209ob	56	974	40.0	- 9 16	8.7	9.7	Ko	2	..	12685b
7	275	39.6	+69 55	9.4	9.4	A	1	..	38112i	57	937	40.0	-16 15	7.60	8.16	Go	6	..	12378b
8	706	39.6	+62 44	9.5	9.6	A2	2	..	38907i	58	1001	40.0	-19 0	9.2	9.9	F8	2	..	12407b
9	732	39.6	+62 0	9.2	9.3	A3	3	..	38136i	59	1003	40.0	-19 0	9.3	9.0	F5	4	..	12407b
10	775	39.6	+59 3	8.0	8.1	A2	5	E	14302i	60	2541	40.0	-24 41	9.7	10.3	G	3	..	2381ob
11	687	39.6	+28 30	7.02	7.80	G5	5	..	37387i	61	1677	40.0	-44 24	9.9	10.7	K5	1	..	20647b
12	834	39.6	+ 0 23	7.28	7.11	B3	8	..	38063i	62	1484	40.0	-47 40	9.2	9.5	Go	3	..	38400b
13	712	39.6	- 1 39	8.2	9.0	G5	4	0.3	14949b	63	276	40.1	+71 23	8.8	9.6	G5	2	..	38112i
14	931	39.6	- 4 15	8.6	9.6	Ko	1	0.1	12685b	64	353	40.1	+66 20	7.7	8.7	Ko	4	..	38112i
15	979	39.6	- 6 25	9.2	9.3	A2	4	..	12685b	65	734	40.1	+61 19	7.7	9.1	Mb	3	E	37556i
16	999	39.6	-10 8	8.7	9.3	Go	2	..	12685b	66	777	40.1	+58 12	8.2	9.2	Ko	5	..	3897oi
17	2027	39.6	-24 58	8.15	9.1	A3	7	..	2381ob	67	880	40.1	+52 55	7.22	7.30	A3	4	..	37406i
18	1698	39.6	-28 51	9.2	10.3	Ko	2	..	20533b	68	731	40.1	+25 51	7.48	7.48	Ao	5	..	38161i
19	1418	39.6	-49 34	9.5	10.2	Ko	1	..	44376b	69	694	40.1	+21 6	9.1	9.9	G5	1	..	38153i
20	431	39.7	+65 28	8.6	9.6	Ko	2	..	38112i	70	713	40.1	+18 59	8.5	8.5	Ao	5	..	38153i
21	973	39.7	+56 35	5.35	5.41	A2	7	..	37426i	71	675	40.1	+15 45	9.1	9.9	G5	3	5.1	6674m
22	739	39.7	+23 27	6.17	6.12	B8	10	..	38153i	72	760	40.1	+ 2 26	8.4	9.4	Ko	3	..	38063i
23	774	39.7	+19 8	8.4	8.4	B9	4	E	38153i	73	983	40.1	- 6 15	8.8	9.1	Fo	3	..	12685b
24	721	39.7	+ 5 41	8.4	8.5	A2	4	..	38083i	74	1705	40.1	-28 52	9.7	10.6	Ko	1	..	17401b
25	813	39.7	+ 1 26	8.4	9.2	G5	1	..	38063i	75	1897	40.1	-32 58	9.7	10.0	F8	1	..	4602ob
26	814	39.7	+ 1 10	9.14	9.92	G5	2	..	15135b	76	1654	40.1	-45 50	9.9	9.8	F8	3	..	38400b
27	906	39.7	-18 51	5.67	5.67	Ao	10	..	8862b	77	414	40.1	-58 12	8.1	9.0	G5	4	..	42691b
28	960	39.7	-21 18	8.35	9.0	G5	6	..	2381ob	78	984	40.2	+45 49	8.00	9.35	Ma	2	..	38088i
29	961	39.7	-21 53	8.9	9.6	Go	6	..	2381ob	79	717	40.2	+18 37	7.8	8.8	Ko	4	2.2	3892oi
30	1478	39.7	-47 21	10.1	10.6	F8	1	..	44376b	80	875	40.2	- 3 16	8.8	9.1	F2	3	..	38063i
31	357	39.7	-61 2	8.2	8.9	Fo	5	..	42691b	81	1004	40.2	-19 6	8.9	8.8	Fo	5	..	12407b
32	356	39.7	-62 59	8.4	8.9	F8	4	..	2043ob	82	1869	40.2	-27 46	7.04	9.1	K2	7	2.8	17401b
33	122	39.7	-81 28	8.4	9.5	K2	5	3.3	20557b	83	1707	40.2	-28 25	9.7	10.6	Go	2	..	17401b
34	831	39.8	+59 19	8.2	9.3	K2	2	..	38136i	84	1422	40.2	-49 10	9.3	9.5	F8	2	..	38400b
35	927	39.8	+55 51	8.2	8.7	F8	5	..	3897oi	85	1471	40.2	-50 40	5.26	7.0	G5	..	0.8	56,120
36	813	39.8	+53 6	6.81	7.15	F2	6	..	37406i	86	560	40.2	-52 21	8.5	9.3	Go	3	..	41013b
37	1048	39.8	+42 49	8.0	8.0	B9	3	..	38088i	87	713	40.2	-56 18	7.8	8.8	F5	6	..	42691b
38	1045	39.8	+40 8	6.12	6.90	G5	8	..	3726oi	88	432	40.3	+65 30	9.0	9.6	Go	2	..	38112i
39	712	39.8	+13 53	9.5	10.3	G5	1	..	3892oi	89	1059	40.3	+50 32	8.2	9.0	G5	2	..	37406i
40	962	39.8	-21 44	9.6	11.1	Ko	2	..	2381ob	90	694	40.3	+27 44	8.4	8.5	A2	3	..	38161i
41	1949	39.8	-32 27	8.1	8.8	K2	2	..	4108ob	91	741	40.3	+23 31	8.5	9.5	Ko	2	..	38153i
42	1479	39.8	-47 50	9.7	9.8	Fo	3	..	38400b	92	977	40.3	-12 23	9.6	10.6	Ko	2	..	24605b
43	685	39.8	-54 59	8.38	8.9	Ko	5	..	41013b	93	2004	40.3	-31 40	7.56	8.5	G5	4	..	4108ob
44	928	39.9	+55 26	6.34	6.62	Fo	7	..	37426i	94	1546	40.3	-41 56	7.9	8.3	Ko	5	..	4209ob
45	1055	39.9	+50 23	8.0	8.6	Go	3	..	37406i	95	932	40.4	+55 33	8.8	8.8	Ao	3	..	3897oi
46	689	39.9	+28 41	8.7	9.3	Go	2	..	37387i	96	1057	40.4	+43 13	8.7	9.0	Fo	3	..	38088i
47	714	39.9	+13 52	9.1	9.2	A2	2	..	3892oi	97	719	40.4	+18 33	6.13	7.13	Ko	7	..	37544i
48	2028	39.9	-25 31	9.5	10.3	Go	2	..	17401b	98	1004	40.4	- 2 52	8.9	9.2	Fo	3	..	14949b
49	1812	39.9	-26 6	7.9	9.2	Fo	6	2.7	20533b	99	949	40.4	-10 58	10.0	10.8	G5	1	..	24605b
50	1652	39.9	-45 30	9.7	10.1	G5	2	..	38400b	100	2130	40.4	-23 53	9.5	9.9	F8	3	..	2381ob

THE HENRY DRAPER CATALOGUE.

30200

4^h 40^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1871	40.4	— 27 25	9.1	10.6	Ko	1	0,1	20533b	51	1862	40.8	— 36 38	8.5	9.5	Ko	4	..	20526b
2	1549	40.4	— 41 15	6.22	7.6	K5	..	5,8	28,197	52	1477	40.8	— 48 27	10.6	10.1	Ao	2	..	38400b
3	1548	40.4	— 41 42	9.7	10.1	F5	2	..	20647b	53	360	40.8	— 61 17	8.4	9.5	Ko	2	..	42691b
4	1604	40.4	— 42 52	9.7	10.1	Ao	2	..	20647b	54	1061	40.9	+ 50 27	8.9	8.9	Ao	2	..	38125i
5	1526	40.4	— 46 38	8.5	9.5	G5	5	..	38400b	55	1060	40.9	+ 43 29	8.8	8.8	A	1	..	38088i
6	359	40.4	— 61 24	7.5	7.7	Ao	7	..	42691b	56	764	40.9	+ 2 55	8.2	8.3	A2	5	..	38063i
7	363	40.4	— 64 38	9.6	9.6	A	3	..	20430b	57	881	40.9	— 3 6	8.1	8.2	A5	..	5,7	56,78
8	778	40.5	+ 58 29	8.9	8.9	Ao	3	..	38970i	58	1529	40.9	— 46 22	9.2	9.8	Ko	3	..	38400b
9	1050	40.5	+ 42 8	8.6	8.6	B9	3	..	38088i	59	1478	40.9	— 48 29	7.9	8.9	G5	5	..	38400b
10	646	40.5	+ 11 31	5.43	5.43	Ao	10	E	37544i	60	702	40.9	— 54 54	9.08	9.7	Go	3	..	41013b
11	876	40.5	— 3 26	4.18	4.06	B5	..	R	56,78	61	1048	41.0	+ 48 3	9.2	9.2	Ao	2	..	38125i
12	963	40.5	— 13 33	9.3	10.3	Ko	2	..	24605b	62	738	41.0	+ 29 9	9.0	9.0	Ao	1	..	38161i
13	924	40.5	— 20 12	8.5	9.3	G5	5	..	23810b	63	725	41.0	+ 18 54	8.4	8.4	Ao	2	..	38153i
14	2545	40.5	— 24 6	9.4	10.3	F5	4	..	23810b	64	782	41.0	+ 17 33	9.1	10.1	Ko	1	5,1	6674m
15	2031	40.5	— 25 53	8.0	9.7	A5	4	2,4	20533b	65	714	41.0	+ 7 10	8.4	8.7	F2	2	..	38083i
16	1712	40.5	— 28 8	7.36	9.1	G5	7	0,8	17401b	66	752	41.0	+ 6 19	8.4	8.4	Ao	3	..	38083i
17	1713	40.5	— 38 40	9.1	10.4	Ko	1	..	42916b	67	766	41.0	+ 2 40	8.8	8.9	A2	6	1,2	15135b
18	1486	40.5	— 47 24	7.4	8.6	Ko	5	..	38400b	68	935	41.0	— 4 16	8.3	8.3	Ao	7	2,2	12685b
19	1472	40.5	— 50 24	9.5	9.2	F8	4	..	38400b	69	986	41.0	— 6 39	9.1	9.9	G5	1	..	12685b
20	179	40.5	— 77 5	8.6	9.6	Ko	3	..	15162b	70	981	41.0	— 12 2	10.2	10.2	A	2	E	24605b
21	987	40.6	+ 45 18	7.72	7.72	Ao	6	..	38088i	71	2554	41.0	— 24 0	9.5	10.3	K2	2	..	23810b
22	763	40.6	+ 2 50	8.4	8.4	Ao	5	..	15135b	72	1876	41.0	— 27 0	8.9	9.7	G5	2	..	17401b
23	1022	40.6	— 5 44	9.2	9.3	A5	1	..	12685b	73	1901	41.0	— 33 3	9.5	10.0	Go	2	..	46020b
24	978	40.6	— 12 48	9.6	10.1	F8	3	..	24605b	74	1904	41.0	— 35 13	9.5	11.5	G5	2	..	46020b
25	942	40.6	— 17 34	9.1	9.7	G	2	..	12407b	75	1903	41.0	— 35 37	10.5	11.5	G5	1	..	46020b
26	925	40.6	— 20 28	8.1	10.0	K2	4	..	23810b	76	1660	41.0	— 45 14	9.9	9.8	F5	1	..	42090b
27	1487	40.6	— 47 43	10.1	10.4	Go	2	..	38400b	77	1474	41.0	— 50 5	9.32	9.5	Ao	4	..	38400b
28	364	40.6	— 64 39	9.3	9.6	F	3	..	20430b	78	703	41.0	— 54 46	7.74	8.5	G5	7	..	41013b
29	369	40.6	— 65 30	9.0	9.6	Go	2	..	20430b	79	838	41.1	+ 60 17	9.2	9.3	A3	2	..	38907i
30	977	40.7	+ 51 23	9.2	9.2	Ao	1	..	38125i	80	1150	41.1	+ 48 21	8.5	8.5	B9	3	..	38125i
31	742	40.7	+ 23 9	9.5	9.8	F	2	..	38153i	81	1055	41.1	+ 42 17	8.6	8.6	Ao	2	..	38088i
32	697	40.7	+ 21 19	9.0	9.1	A5	4	..	38153i	82	937	41.1	+ 36 32	7.95	8.23	Fo	4	..	37260i
33	777	40.7	+ 19 19	8.0	9.1	K2	1	..	38153i	83	726	41.1	+ 18 31	9.3	9.3	B9	1	..	38920i
34	749	40.7	+ 4 10	8.0	8.0	B9	5	..	38083i	84	649	41.1	+ 16 7	9.1	10.2	K2	1	..	6674m
35	952	40.7	— 11 21	10.2	11.2	Ko	2	..	24605b	85	755	41.1	+ 8 9	8.0	9.1	K2	2	..	38083i
36	964	40.7	— 13 5	9.6	10.2	G	2	..	24605b	86	664	41.1	+ 3 7	7.9	8.5	Go	5	..	38063i
37	910	40.7	— 18 21	8.8	9.6	G5	3	..	12407b	87	842	41.1	+ 1 3	8.91	9.47	Go	2	..	12390b
38	966	40.7	— 21 28	6.03	7.9	K2	6	2,10	17429b	88	764	41.1	— 0 35	9.1	9.7	G	1	..	38183i
39	1820	40.7	— 26 53	9.2	9.4	A5	5	0,5	20533b	89	967	41.1	— 13 31	9.8	10.8	Ko	3	..	24605b
40	1875	40.7	— 26 57	8.0	8.6	Ko	4	0,3	17401b	90	945	41.1	— 17 30	8.7	8.8	A2	5	..	12407b
41	1489	40.7	— 47 11	9.1	9.8	Ko	2	..	38400b	91	2556	41.1	— 24 19	9.1	9.1	A5	5	..	23810b
42	1427	40.7	— 49 1	9.1	9.8	G5	2	..	38400b	92	1479	41.1	— 48 31	6.81	7.6	F5	8	..	38400b
43	350	40.8	+ 67 59	var.	var.	Nb	1	0,1 R	38112i	93	1476	41.1	— 50 4	8.4	9.5	K2	2	R	38400b
44	536	40.8	+ 63 27	6.72	6.72	Ao	7	0,6	36654i	94	564	41.1	— 52 44	7.5	8.6	Ko	6	..	41013b
45	1065	40.8	+ 40 3	8.52	8.52	A	2	E	38088i	95	361	41.1	— 61 49	8.6	9.3	G5	2	..	42691b
46	678	40.8	+ 15 17	7.9	8.7	G5	2	..	37544i	96	377	41.1	— 62 34	8.8	8.9	A5	3	..	42691b
47	751	40.8	+ 14 21	8.2	8.5	Fo	2	..	37544i	97	1246	41.2	+ 49 21	8.5	9.3	G5	1	..	38125i
48	953	40.8	— 11 1	9.6	10.0	F5	4	..	24605b	98	665	41.2	+ 3 51	8.6	8.9	Fo	4	..	15135b
49	904	40.8	— 22 18	9.2	10.2	Go	2	..	23810b	99	819	41.2	+ 1 8	8.49	8.99	F8	3	..	38063i
50	2132	40.8	— 23 2	9.7	9.9	K5	3	0,2	23810b	100	883	41.2	— 3 53	8.8	9.4	Go	3	..	14949b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

30300

4^h 41^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	893	41.2	— 7 11	8.1	8.7	Go	6	..	12685b	51	1538	41.7	— 43 35	9.5	10.1	A3	2	..	20647b
2	977	41.2	— 9 50	8.71	9.71	Ko	2	..	12685b	52	718	41.7	— 56 33	8.4	10.0	K2	2	..	42691b
3	858	41.2	— 15 7	8.7	8.8	A2	3	..	12378b	53	1069	41.8	+ 43 6	7.7	8.3	Gop	4	E	38088i
4	1827	41.2	— 26 13	8.1	9.7	K5	3	0,3	20533b	54	702	41.8	+ 21 59	8.7	10.1	Ma	..	..	M
5	1532	41.2	— 46 27	7.9	8.9	Ko	7	..	38400b	55	786	41.8	+ 18 5	8.2	8.8	Go	3	..	38920i
6	278	41.2	— 71 41	7.3	8.1	G5	6	..	20540b	56	845	41.8	+ 0 26	8.6	9.6	Ko	1	..	38063i
7	1247	41.3	+ 49 55	8.8	9.8	Ko	1	..	38125i	57	886	41.8	— 3 51	9.3	9.7	F5	2	..	14949b
8	1064	41.3	+ 43 9	7.9	8.7	G5	1	..	38088i	58	2141	41.8	— 23 29	9.2	9.3	Go	5	2,3	23810b
9	686	41.3	+ 24 11	9.8	10.2	F5	1	..	38153i	59	1990	41.8	— 30 50	8.7	9.7	K2	2	E	20533b
10	727	41.3	+ 18 18	7.8	8.8	Ko	4	0,2	38920i	60	1693	41.8	— 44 44	8.28	9.2	K2	5	..	42090b
11	759	41.3	+ 8 50	7.15	7.57	F5	5	..	38083i	61	1497	41.8	— 47 35	8.5	8.9	Go	4	0,6 E	38400b
12	666	41.3	+ 3 47	9.1	9.4	F2	3	..	15135b	62	372	41.8	— 58 58	8.5	8.6	A2	4	..	42691b
13	767	41.3	+ 2 31	9.8	9.9	A2	4	..	15135b	63	271	41.8	— 68 47	8.5	9.5	Ko	5	..	20430b
14	958	41.3	— 14 39	8.9	9.3	F5	1	..	12378b	64	173	41.9	+ 77 26	8.4	8.5	A5	3	..	37558i
15	2011	41.3	— 31 7	8.0	8.6	Fo	6	..	46020b	65	728	41.9	+ 5 37	6.64	6.64	Ao	9	..	38083i
16	1906	41.3	— 33 13	7.7	8.5	F8	5	..	41080b	66	971	41.9	— 13 36	8.7	9.8	K2	3	..	24605b
17	566	41.3	— 52 27	6.71	7.5	Fo	8	..	44376b	67	970	41.9	— 21 39	8.7	8.7	Fo	7	..	23810b
18	371	41.3	— 65 42	8.6	9.6	Ko	5	..	20430b	68	2043	41.9	— 24 57	9.40	10.0	G5	1	..	17401b
19	314	41.3	— 66 5	9.6	10.4	G5	2	..	20430b	69	2044	41.9	— 25 20	7.42	7.8	F2	8	..	20533b
20	1009	41.4	— 2 15	9.3	9.9	Go	2	..	14949b	70	1884	41.9	— 27 14	9.1	9.4	G5	2	..	20533b
21	884	41.4	— 3 8	6.29	6.35	A2	..	2,9	56,78	71	1912	41.9	— 35 31	10.8	11.8	K5	1	..	46020b
22	1006	41.4	— 10 25	8.9	10.1	K5	3	..	24605b	72	1538	41.9	— 46 2	9.5	10.7	K5	1	..	44376b
23	1853	41.4	— 34 19	10.5	11.5	G5	1	..	46020b	73	567	41.9	— 52 49	8.0	8.3	Fo	6	..	41013b
24	358	41.4	— 63 24	7.7	8.0	Fo	6	..	20430b	74	278	41.9	— 75 17	9.8	9.8	Ao	1	..	46167b
25	340	41.4	— 67 5	8.8	9.8	Ko	5	..	20430b	75	180	41.9	— 77 16	9.4	9.5	A2	1	..	46167b
26	817	41.5	+ 53 42	8.6	9.8	K5	1	..	38970i	76	357	42.0	+ 66 19	8.0	8.8	G5	3	..	38112i
27	754	41.5	+ 22 8	8.8	9.1	F2	2	..	38213i	77	921	42.0	+ 47 1	8.1	8.1	B9	5	..	38125i
28	768	41.5	+ 2 32	8.8	9.8	Ko	3	5,1	15135b	78	741	42.0	+ 29 37	7.36	7.34	B9	6	..	37387i
29	1010	41.5	— 2 23	9.6	9.7	A2	3	..	14949b	79	695	42.0	+ 29 3	7.01	7.43	F5	6	..	37387i
30	1028	41.5	— 5 26	9.3	10.1	G5	1	..	12685b	80	734	42.0	+ 25 37	8.5	9.1	Go	2	..	38153i
31	1007	41.5	— 10 2	9.6	9.7	A2	3	..	24605b	81	729	42.0	+ 18 14	9.5	9.5	A	1	..	38920i
32	955	41.5	— 11 45	7.56	7.54	B9	6	..	12378b	82	787	42.0	+ 17 44	9.5	10.3	G5	1	..	38920i
33	944	41.5	— 16 42	8.9	8.9	Ao	6	..	12407b	83	649	42.0	+ 12 57	8.5	9.1	Go	2	..	38204i
34	1963	41.5	— 32 13	8.9	10.1	K2	1	..	46020b	84	957	42.0	— 10 59	10.0	11.0	Ko	1	..	24605b
35	1689	41.5	— 44 36	9.7	9.8	A2	4	..	42090b	85	916	42.0	— 18 0	7.7	8.7	Ko	7	..	12407b
36	1236	41.5	— 51 16	9.5	9.8	F5	2	..	38400b	86	1540	42.0	— 46 35	9.7	9.8	Go	3	..	38400b
37	279	41.5	— 71 3	9.8	9.8	Ao	2	..	20540b	87	419	42.0	— 58 44	8.5	9.5	K2	3	..	42691b
38	155	41.6	+ 81 2	5.32	6.32	Ko	10	..	37558i	88	242	42.1	+ 72 53	8.0	8.4	F5	4	..	37630i
39	818	41.6	+ 53 11	7.8	8.3	F8	3	..	38970i	89	1251	42.1	+ 49 24	7.76	7.84	A3	5	E	37406i
40	1151	41.6	+ 48 47	8.6	8.6	Ao	1	..	38125i	90	757	42.1	+ 15 0	8.89	9.89	Ko	1	0,2	38920i
41	1059	41.6	+ 42 25	8.5	9.5	Ko	1	..	38088i	91	716	42.1	+ 13 40	9.5	9.5	A	1	..	38204i
42	651	41.6	+ 9 52	7.32	7.38	A2	7	..	38083i	92	655	42.1	+ 10 0	8.27	8.27	Ao	2	..	38075i
43	1855	41.6	— 34 21	10.3	11.0	Go	1	..	46020b	93	958	42.1	— 11 9	9.6	10.6	Ko	4	..	24605b
44	1556	41.6	— 41 56	8.8	9.1	F5	4	..	42090b	94	1888	42.1	— 27 35	9.9	9.7	Go	2	..	17401b
45	278	41.7	+ 69 26	8.6	9.4	G5	2	..	38112i	95	1870	42.1	— 29 14	8.9	9.1	Go	2	..	20533b
46	940	41.7	— 4 39	8.5	9.7	K5	2	..	12685b	96	1921	42.1	— 33 22	9.1	9.4	F5	2	..	41080b
47	939	41.7	— 4 48	8.90	9.46	Go	2	..	12685b	97	1859	42.1	— 34 11	6.84	7.4	B9	7	..	41080b
48	1008	41.7	— 10 11	10.5	11.3	G5	2	..	24605b	98	1242	42.1	— 51 46	9.1	9.5	F5	3	..	38400b
49	1729	41.7	— 28 50	8.1	8.8	Ko	5	..	20533b	99	374	42.1	— 65 13	9.7	9.8	A5	4	..	20430b
50	1540	41.7	— 43 12	9.1	10.1	Ko	1	..	42090b	100	279	42.1	— 74 58	9.2	9.8	Go	2	..	15162b

THE HENRY DRAPER CATALOGUE.

30400

4^h 42^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1050	42.2	+47 21	9.4	9.5	A3	1	..	38125i	51	884	42.8	+53 5	8.6	8.6	Ao	1	..	3897oi
2	750	42.2	+26 48	7.8	8.8	Ko	2	..	38161i	52	968	42.8	+37 10	8.0	9.0	Ko	3	..	38934i
3	681	42.2	+15 49	9.1	10.1	Ko	1	2,1	3892oi	53	840	42.8	+32 25	5.94	6.02	A3	6	0,7 R	3726oi
4	771	42.2	+ 2 45	8.8	9.9	K2	1	..	15135b	54	816	42.8	+31 16	5.76	6.76	Ko	7	0,6	37387i
5	972	42.2	-13 46	8.6	9.6	Ko	6	..	24605b	55	734	42.8	+18 32	6.79	7.57	G5	..	0,6 R	56,78
6	2147	42.2	-23 42	9.9	10.0	G5	1	..	17402b	56	789	42.8	+17 38	7.87	8.21	F2	4	..	37544i
7	1614	42.2	-42 9	9.2	10.6	Ko	1	..	4209ob	57	634	42.8	+10 51	9.5	9.5	Ao	2	..	38204i
8	1671	42.2	-45 37	9.7	10.1	F8	2	..	44376b	58	961	42.8	-11 16	9.6	10.6	Ko	2	..	24605b
9	1075	42.3	+44 3	8.0	8.0	Ao	4	..	38088i	59	990	42.8	-12 10	9.6	10.6	Ko	2	..	24605b
10	1076	42.3	+43 21	8.0	8.8	G5	4	..	38088i	60	952	42.8	-17 26	9.3	9.9	Go	3	..	12628b
11	901	42.3	+33 49	8.10	8.38	Fo	3	..	37387i	61	1971	42.8	-32 37	9.5	9.7	A2	3	..	4602ob
12	1491	42.3	-49 58	10.3	10.6	F8	1	..	44376b	62	1879	42.8	-35 59	7.80	9.0	Ko	5	0,4	20526b
13	1244	42.3	-51 27	8.0	8.4	F5	6	..	38400b	63	317	42.8	-66 43	9.1	9.5	F5	5	..	2043ob
14	1243	42.3	-51 40	9.1	9.5	Go	4	..	38400b	64	834	42.9	+59 28	9.5	9.5	Ao	1	..	38907i
15	749	42.3	-53 26	9.0	10.4	G5	1	..	41013b	65	1070	42.9	+50 14	8.07	9.42	Ma	2	..	38125i
16	126	42.4	+83 19	8.6	9.7	K2	3	..	37558i	66	742	42.9	+29 24	7.21	7.21	Aop	6	R	37387i
17	922	42.4	+46 21	8.8	9.9	K2	2	..	38125i	67	752	42.9	+26 50	7.6	8.2	Go	4	..	37387i
18	689	42.4	+24 35	8.0	8.3	F2	5	..	38153i	68	707	42.9	+21 9	6.91	6.91	Ao	8	..	38153i
19	949	42.4	-17 8	9.3	9.9	G	1	..	12628b	69	653	42.9	+12 9	7.8	8.6	G5	4	..	37544i
20	921	42.4	-18 35	7.7	8.1	F5	5	..	12628b	70	637	42.9	+10 45	10.5	10.6	A2	1	..	38204i
21	2149	42.4	-22 58	8.3	8.6	F2	6	0,5-	17402b	71	753	42.9	+ 4 37	9.1	9.7	Go	2	..	46195b
22	1735	42.4	-28 16	5.97	6.9	A2	..	..	56,120	72	674	42.9	+ 3 33	9.8	9.8	Ao	3	..	15135b
23	1922	42.4	-33 49	8.8	9.7	Go	3	..	4602ob	73	985	42.9	- 9 26	8.7	8.7	Ao	2	..	12685b
24	1615	42.4	-42 44	7.2	7.7	Ao	9	..	4209ob	74	1874	42.9	-34 19	9.9	10.6	Go	3	..	4602ob
25	280	42.5	+69 52	8.84	8.84	Ao	2	..	38112i	75	1728	42.9	-38 17	7.46	7.9	Ko	4	..	12287b
26	351	42.5	+68 3	8.9	8.9	Ao	2	..	38112i	76	1570	42.9	-40 5	9.35	9.4	Go	2	5,1	20647b
27	976	42.5	+56 21	7.74	8.16	F5	3	..	37426i	77	1700	42.9	-44 28	8.7	9.0	F8	7	..	4209ob
28	852	42.5	+ 0 22	9.1	10.1	Ko	3	..	46195b	78	376	42.9	-59 55	5.35	5.43	A3	..	1, R	56,121
29	947	42.5	-16 20	8.7	9.0	Fo	7	..	12407b	79	181	42.9	-77 50	5.88	7.0	Ko	..	..	56,121
30	976	42.5	-21 52	9.1	9.3	A5	5	..	2381ob	80	827	43.0	+54 15	8.0	8.4	F5	2	..	3897oi
31	1868	42.5	-34 19	10.8	11.5	F8	1	..	4602ob	81	1082	43.0	+43 52	8.8	8.8	A	2	..	38088i
32	1624	42.5	-39 32	6.04	7.0	Ko	8	..	12287b	82	698	43.0	+28 11	7.49	8.49	Ko	4	..	37387i
33	365	42.5	-64 6	9.8	9.8	Ao	4	..	2043ob	83	654	43.0	+16 28	7.52	7.94	F5	5	..	37544i
34	736	42.6	+61 57	9.2	9.2	Ao	2	..	38907i	84	638	43.0	+10 45	10.5	10.5	A	2	..	38204i
35	1052	42.6	+47 41	8.8	9.1	F2	2	..	38125i	85	639	43.0	+10 45	8.8	9.6	G5	1	..	38204i
36	771	42.6	- 0 16	8.2	8.5	F2	3	..	38063i	86	855	43.0	+ 0 31	7.8	8.1	F2	5	..	38063i
37	1011	42.6	-10 19	10.0	10.8	G5	2	..	24605b	87	1013	43.0	-10 53	9.2	9.6	F5	6	..	24605b
38	1012	42.6	-10 40	9.3	9.6	Fo	4	..	24605b	88	1676	43.0	-45 54	8.6	9.8	Ko	3	..	4209ob
39	977	42.6	-21 23	7.19	8.4	G5	9	..	2381ob	89	1494	43.0	-48 38	10.3	10.1	F5	2	..	38400b
40	1695	42.6	-44 4	8.9	9.5	Ko	3	..	4209ob	90	723	43.0	-56 28	7.7	9.1	Ko	4	..	42691b
41	421	42.6	-58 50	8.4	9.3	Ko	3	..	42691b	91	289	43.0	-69 15	8.9	9.5	Go	2	..	2043ob
42	543	42.7	+63 20	5.81	7.16	Ma	5	0,7	37556i	92	641	43.1	+10 46	9.3	9.3	Ao	2	..	38204i
43	911	42.7	+34 49	9.0	..	Nb	..	..	M	93	941	43.1	- 8 53	9.2	10.2	Ko	2	..	12685b
44	721	42.7	+30 47	8.6	8.9	Fo	2	..	37387i	94	993	43.1	-11 57	10.5	11.3	G5	1	..	24605b
45	766	42.7	+ 8 47	8.5	8.9	F5	3	..	38083i	95	954	43.1	-17 7	5.63	6.19	Go	9	..	12407b
46	951	42.7	-17 26	9.6	10.2	G	1	..	12628b	96	916	43.1	-22 44	8.5	10.0	G5	4	0,3	2381ob
47	1842	42.7	-26 29	7.76	8.3	Fo	7	2,9	17401b	97	1874	43.1	-29 35	7.50	8.2	Ko	6	..	20533b
48	1895	42.7	-27 28	9.9	9.4	Ao	4	..	20533b	98	1876	43.1	-29 56	8.49	8.2	F2	4	..	20533b
49	342	42.7	-67 35	9.1	9.6	F8	3	..	2043ob	99	1929	43.1	-33 21	9.5	10.0	Go	2	..	4602ob
50	50	42.7	-84 17	9.1	10.1	Ko	3	..	20538b	100	1894	43.1	-37 38	7.75	9.2	K5	6	..	20526b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

30500

4^h 43^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1492	43.1	-50 14	7.77	8.0	G5	8	..	38400b	51	1439	43.5	-49 26	var.	var.	Md	5	R	41001b
2	570	43.1	-52 9	8.5	10.2	K5	1	..	38400b	52	376	43.5	-65 41	9.3	9.6	Fo	4	..	20430b
3	885	43.2	+52 13	8.8	8.8	Ao	2	..	38125i	53	343	43.5	-66 59	9.5	10.1	Go	2	..	20430b
4	969	43.2	+37 19	5.10	6.17	K2	8	..	37260i	54	152	43.5	-79 39	8.04	8.6	K2	4	0.4	20557b
5	736	43.2	+18 27	8.8	9.2	F5	2	..	38920i	55	354	43.6	+67 20	7.49	7.83	F2	5	..	36654i
6	684	43.2	+15 24	8.8	9.6	G5	1	..	38920i	56	435	43.6	+65 49	7.57	8.35	G5	4	0.3	36654i
7	725	43.2	+7 40	7.5	8.7	K5	3	..	38075i	57	1162	43.6	+48 35	5.79	6.57	G5	6	5.9	2219b
8	773	43.2	+2 33	6.66	7.44	G5	7	..	38063i	58	655	43.6	+11 40	8.2	8.3	A3	3	E	37544i
9	821	43.2	+1 18	8.6	8.6	Ao	4	..	38063i	59	861	43.6	+0 34	8.6	9.6	Ko	1	..	12390b
10	774	43.2	-0 34	8.2	9.4	K5	3	5.2	12390b	60	729	43.6	-1 32	8.4	9.2	G5	2	..	38063i
11	942	43.2	-8 28	8.7	9.2	F8	5	..	12685b	61	897	43.6	-3 30	8.9	9.4	F8	4	..	14949b
12	1014	43.2	-10 36	10.0	10.4	F5	2	..	24605b	62	1044	43.6	-5 50	6.00	6.56	Go	5	0.10	2298b
13	964	43.2	-11 45	9.6	10.1	F8	5	..	24605b	63	967	43.6	-11 15	10.0	11.2	K5	1	..	24605b
14	865	43.2	-15 21	8.3	9.3	Ko	2	..	12628b	64	1845	43.6	-26 23	9.1	10.0	Ko	1	..	20533b
15	2054	43.2	-25 19	8.70	9.4	Ko	3	..	20533b	65	1938	43.6	-33 21	9.5	9.4	F5	4	..	46020b
16	1567	43.2	-41 16	8.5	9.4	F5	3	5.2	20647b	66	1733	43.6	-38 29	7.33	8.1	G5	6	..	12287b
17	1497	43.2	-48 13	8.7	9.8	G5	3	..	38400b	67	1731	43.6	-38 39	11.0	10.1	Go	2	5.2	42916b
18	936	43.3	+55 41	9.0	9.6	Go	5	..	38970i	68	281	43.6	-71 41	8.0	8.4	F5	5	..	20540b
19	734	43.3	+5 25	8.2	9.3	K2	2	..	38083i	69	90	43.7	+84 46	9.4	9.5	A2	1	..	38330i
20	857	43.3	+0 37	8.8	9.6	G5	1	..	38183i	70	925	43.7	+46 6	8.5	8.5	B9	3	..	38088i
21	899	43.3	-7 11	8.5	9.5	Ko	3	..	12685b	71	700	43.7	+28 46	8.8	9.3	F8	2	..	37387i
22	1016	43.3	-10 46	8.6	9.6	Ko	7	..	24605b	72	747	43.7	+23 14	8.6	9.2	Go	3	..	38153i
23	965	43.3	-11 6	9.8	11.0	K5	2	..	24605b	73	682	43.7	+3 31	7.07	7.07	Ao	8	..	38063i
24	934	43.3	-20 34	8.6	10.0	K2	3	..	23810b	74	969	43.7	-11 3	9.6	10.2	Go	5	..	24605b
25	2167	43.3	-23 7	9.1	9.6	Ko	3	0.2	23810b	75	1980	43.7	-32 5	10.1	10.1	Go	1	..	46020b
26	750	43.3	-53 36	9.2	10.0	F8	2	..	41013b	76	1923	43.7	-35 52	9.1	9.8	A2	3	..	20526b
27	707	43.3	-54 25	9.3	9.8	F8	3	..	41013b	77	1505	43.7	-47 52	10.1	11.0	K	1	..	38400b
28	280	43.3	-75 20	9.2	9.3	A2	2	..	46167b	78	1502	43.7	-48 27	9.7	9.8	Fo	3	..	38400b
29	325	43.4	+70 43	9.2	10.0	G5	1	..	38112i	79	571	43.7	-52 5	8.1	9.2	Ko	4	..	38400b
30	353	43.4	+68 3	7.42	8.42	Ko	4	0.3	36654i	80	271	43.7	-73 43	8.6	8.7	A3	4	2.4	46167b
31	1079	43.4	+39 39	8.8	9.8	Ko	1	..	38934i	81	837	43.8	+59 52	9.2	9.7	F8	1	..	38907i
32	685	43.4	+15 41	8.5	9.0	F8	3	..	38920i	82	980	43.8	+56 15	7.6	8.0	F5	2	..	37426i
33	858	43.4	+0 38	8.6	9.6	Ko	1	0.1	38183i	83	829	43.8	+54 45	8.0	8.4	F5	4	..	37426i
34	1021	43.4	-2 2	8.8	9.1	Fo	3	..	14949b	84	1036	43.8	+44 47	8.0	8.0	B9	3	..	38088i
35	986	43.4	-9 41	7.16	7.16	Ao	4	2.8	2298b	85	1088	43.8	+43 19	8.9	8.9	Ao	2	..	38088i
36	935	43.4	-20 7	9.1	9.9	Go	2	..	23810b	86	1062	43.8	+40 26	8.2	9.2	Ko	2	..	38088i
37	979	43.4	-20 59	7.9	8.6	Ao	8	..	23810b	87	701	43.8	+28 41	8.0	8.1	A5	4	..	37387i
38	2169	43.4	-23 42	9.7	9.6	Go	2	..	17402b	88	709	43.8	+21 46	8.2	8.2	Ao	6	..	38153i
39	1901	43.4	-26 57	8.7	9.4	F2	3	..	20533b	89	686	43.8	+15 43	7.92	8.42	F8	3	..	37544i
40	1624	43.4	-42 16	7.7	7.8	A5	7	..	42090b	90	755	43.8	+5 3	9.1	9.4	F	4	R	38083i
41	1703	43.4	-44 26	9.5	9.5	Go	3	..	42090b	91	1025	43.8	-2 49	8.9	9.7	G5	1	..	14949b
42	1494	43.4	-50 48	8.86	9.5	G5	4	..	38400b	92	903	43.8	-7 50	8.7	8.7	Ao	3	..	12685b
43	319	43.4	-66 55	8.6	9.2	Go	6	..	20430b	93	1884	43.8	-36 23	var.	var.	Nb	3	0.2 R	20526b
44	679	43.5	+3 29	7.12	7.10	B9	8	..	38063i	94	1681	43.8	-45 50	9.3	10.4	K5	1	..	42090b
45	681	43.5	+3 25	6.20	7.20	Ko	8	0.8	38063i	95	1253	43.8	-51 14	8.9	9.8	G5	3	..	38400b
46	902	43.5	-7 25	9.2	9.2	Ao	3	..	12685b	96	710	43.8	-54 33	8.4	9.2	Ao	5	..	41013b
47	966	43.5	-11 21	9.3	10.3	Ko	4	..	24605b	97	928	43.9	+46 28	9.2	10.4	K5	..	..	M
48	2007	43.5	-30 52	9.7	9.7	Go	2	..	46020b	98	649	43.9	+10 49	9.3	9.3	Ao	2	..	38204i
49	1937	43.5	-33 47	8.1	9.2	G5	3	..	41080b	99	994	43.9	-6 1	8.9	9.0	A3	3	..	12685b
50	1625	43.5	-42 47	8.5	8.8	F5	4	..	42090b	100	997	43.9	-11 56	8.1	8.2	A5	8	..	24605b

THE HENRY DRAPER CATALOGUE.

30600

4^h 43^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	927	43.9	-18 26	8.8	9.1	Fo	2	..	12628b	51	817	44.4	+31 23	7.8	8.8	Ko	2	..	37387i
2	982	43.9	-21 5	8.7	9.3	F2	5	..	23810b	52	762	44.4	+ 6 47	3.31	3.81	F8	..	R	1624c
3	2031	43.9	-31 28	9.2	10.1	K2	1	..	46020b	53	782	44.4	- 0 48	8.2	9.2	Ko	2	..	14949b
4	327	44.0	+70 29	8.6	9.2	Go	2	..	38112i	54	949	44.4	- 3 57	8.3	8.6	Fo	5	..	14949b
5	687	44.0	+15 43	6.34	7.12	G5	5	..	37544i	55	972	44.4	-11 38	9.2	9.7	F8	5	..	24605b
6	956	44.0	-16 30	5.97	6.47	F8	8	..	12407b	56	2590	44.4	-24 24	8.9	10.0	K5	2	..	17402b
7	1014	44.0	-19 54	8.33	9.9	K5	3	..	23810b	57	1944	44.4	-33 27	9.1	9.4	F8	2	..	41080b
8	2011	44.0	-30 12	6.35	7.9	Ko	10	R	20533b	58	1927	44.4	-35 13	9.5	10.7	Go	3	..	46020b
9	336	44.0	-59 59	8.74	8.9	Ao	4	..	42691b	59	981	44.5	+56 41	9.2	9.2	A	1	..	38970i
10	365	44.0	-63 24	6.32	7.6	Ko	8	..	20430b	60	1075	44.5	+50 39	8.9	8.9	Ao	2	..	38125i
11	369	44.0	-63 57	8.7	9.8	K2	2	..	20430b	61	842	44.5	+32 16	9.0	9.0	Ao	2	..	37387i
12	282	44.0	-71 7	5.69	5.67	B9	..	R	56,121	62	791	44.5	+17 21	8.84	9.18	F2	1	..	37544i
13	170	44.1	+81 7	8.5	9.3	G5	4	..	37558i	63	662	44.5	+ 9 19	8.5	8.9	F5	2	..	38204i
14	358	44.1	+66 10	4.38	4.14	Bo	..	..	56,78	64	906	44.5	- 7 27	9.3	9.4	A5	3	..	12685b
15	483	44.1	+64 32	10.2	10.2	Ao	1	..	38907i	65	907	44.5	- 7 33	9.3	9.9	Go	2	..	12685b
16	980	44.1	+41 24	8.1	9.1	Ko	2	..	38088i	66	960	44.5	-17 19	8.3	9.5	K5	2	..	12628b
17	974	44.1	+37 35	8.0	8.3	F2	4	..	37260i	67	2180	44.5	-23 52	9.2	8.7	A2	4	..	17402b
18	684	44.1	+ 3 6	8.6	9.6	Ko	3	0,2	15135b	68	2067	44.5	-25 7	9.50	10.0	Ko	1	..	20533b
19	905	44.1	- 7 17	8.1	8.4	F2	6	..	12685b	69	1759	44.5	-28 35	9.2	9.7	G5	2	..	20533b
20	867	44.1	-15 24	8.2	8.5	F2	6	..	12628b	70	1583	44.5	-40 37	9.1	10.0	Ko	1	5,1	42090b
21	958	44.1	-16 20	8.1	9.1	Ko	6	..	12628b	71	366	44.5	-63 52	9.5	9.8	F2	3	..	20430b
22	938	44.1	-20 2	7.88	9.3	Ma	4	..	23810b	72	278	44.6	+71 6	9.2	9.2	Ao	1	..	38112i
23	1501	44.1	-50 34	8.81	8.9	F5	6	..	38400b	73	983	44.6	+51 13	8.4	8.4	A	5	..	38125i
24	929	44.2	+46 47	9.4	9.4	Ao	2	..	38125i	74	984	44.6	+41 50	9.2	9.2	A	1	..	38088i
25	731	44.2	- 1 3	8.2	9.0	G5	3	..	38063i	75	704	44.6	+28 10	7.72	7.55	B3	5	..	37387i
26	946	44.2	- 8 4	9.1	9.5	F5	2	..	12685b	76	657	44.6	+17 2	7.22	7.72	F8	7	..	37544i
27	939	44.2	-20 36	8.5	8.8	F8	5	..	23810b	77	775	44.6	+ 8 15	7.8	7.6	Bo	7	..	38075i
28	1907	44.2	-27 2	9.9	10.0	Go	1	..	17401b	78	730	44.6	+ 7 31	8.4	8.9	F8	2	..	38204i
29	365	44.2	-61 18	8.9	9.5	Ao	2	..	42691b	79	995	44.6	- 9 11	7.7	7.8	A2	3	1,8	2298b
30	377	44.2	-65 9	9.1	9.9	G5	4	..	20430b	80	1020	44.6	-10 38	10.0	11.0	Ko	3	..	24605b
31	889	44.3	+52 35	8.8	9.2	F5	4	..	38970i	81	1019	44.6	-10 45	9.3	9.3	B9	7	..	24605b
32	789	44.3	+19 45	8.4	9.4	Ko	2	..	38153i	82	1945	44.6	-33 2	9.1	10.1	Ko	1	..	46020b
33	689	44.3	+15 21	7.84	7.92	A3	4	..	37544i	83	1930	44.6	-35 50	10.3	10.7	F5	2	..	46020b
34	720	44.3	+13 33	7.5	8.6	K2	4	..	37544i	84	1553	44.6	-46 46	8.5	8.9	Go	7	..	38400b
35	781	44.3	+ 2 46	8.8	8.9	A5	3	..	15135b	85	739	44.7	+61 19	6.63	6.69	A2	6	0,7	36654i
36	823	44.3	+ 2 1	7.6	7.6	Ao	7	..	38063i	86	907	44.7	+33 56	7.7	7.8	A3	4	2,4	37387i
37	1046	44.3	- 5 9	7.05	7.00	B8	3	3,9	2298b	87	651	44.7	+10 26	8.0	8.3	F2	3	..	38075i
38	977	44.3	-13 25	8.8	9.9	K2	5	..	24605b	88	948	44.7	- 8 17	8.1	9.2	K2	3	..	12685b
39	1744	44.3	-38 13	9.4	9.7	F8	3	..	20526b	89	1021	44.7	-10 46	9.3	9.8	F8	5	..	24605b
40	574	44.3	-52 12	9.2	9.8	A3	3	..	38400b	90	979	44.7	-13 23	9.6	10.7	K2	2	..	24605b
41	691	44.3	-55 3	8.68	9.1	F5	5	..	41013b	91	868	44.7	-15 53	7.92	8.99	K2	3	..	12628b
42	337	44.3	-59 58	var.	var.	Md	..	R	M	92	2182	44.7	-23 27	7.7	8.2	F8	8	..	23810b
43	175	44.4	+77 17	8.8	8.8	Ao	2	..	37558i	93	1584	44.7	-40 9	9.4	9.8	F5	2	..	20647b
44	360	44.4	+66 16	8.2	9.2	Ko	4	0,4	38952i	94	1714	44.7	-44 26	8.0	8.3	Fo	8	..	42090b
45	545	44.4	+63 52	8.9	9.5	Go	3	..	38907i	95	841	44.8	+60 32	9.7	9.7	Ao	1	..	38907i
46	738	44.4	+61 17	8.7	9.5	G5	4	0,2	38907i	96	831	44.8	+54 52	8.0	8.1	A3	3	..	37426i
47	1260	44.4	+49 59	9.07	9.07	Ao	2	..	38125i	97	832	44.8	+54 21	8.6	9.1	F8	2	..	38970i
48	1056	44.4	+47 14	9.2	9.2	A	1	..	38125i	98	1076	44.8	+50 37	8.5	8.5	B9	3	..	38125i
49	992	44.4	+45 41	7.12	7.68	Go	7	2,3	38088i	99	1059	44.8	+47 7	9.2	9.6	F5	1	..	38125i
50	1096	44.4	+43 24	7.37	7.25	B5	6	..	38088i	100	1000	44.8	- 6 35	7.9	8.7	G5	5	..	12685b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

30700

4^h 44^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	999	44.8	- 6 49	8.7	9.5	G5	2	..	12685b	51	356	45.2	+67 23	7.97	9.15	K5	2	..	38112i
2	1993	44.8	-32 16	9.5	9.4	Fo	4	..	46020b	52	891	45.2	+52 39	6.34	6.40	A2	..	2,10	56,78
3	1628	44.8	-42 4	9.1	9.8	Ko	3	..	20647b	53	1068	45.2	+40 22	8.4	8.7	F2	3	..	38088i
4	1629	44.8	-42 37	9.5	9.4	F2	4	..	20647b	54	706	45.2	+28 29	8.6	9.6	K	1	..	37387i
5	1556	44.8	-46 13	9.2	9.3	F8	5	..	38400b	55	707	45.2	+28 21	var.	var.	Nb	2	R	37387i
6	..	44.9	+64 24	..	..	K2	1	..	38907i	56	1050	45.2	- 5 23	8.7	9.9	K5	3	..	12685b
7	987	44.9	+41 53	7.8	8.8	Ko	3	..	38088i	57	1952	45.2	-33 38	8.0	8.2	Go	5	..	41080b
8	914	44.9	+35 39	6.77	7.55	G5	6	..	37260i	58	1899	45.2	-36 52	8.8	10.4	Ko	2	..	20526b
9	727	44.9	+30 51	8.8	8.8	A	1	R	37387i	59	272	45.2	-68 12	7.7	8.1	F5	6	..	20430b
10	691	44.9	+15 37	10.1	..	Na	..	..	M	60	946	45.3	+36 58	8.5	8.9	F5	3	..	38934i
11	690	44.9	+15 32	9.1	9.2	A2	3	..	38920i	61	763	45.3	+22 48	9.4	10.0	Go	2	..	38153i
12	770	44.9	+14 55	8.2	9.0	G5	2	..	37544i	62	826	45.3	+ 1 22	8.8	10.0	K5	2	..	12390b
13	663	44.9	+ 9 23	9.3	9.3	A	1	..	38204i	63	867	45.3	+ 0 52	8.6	8.9	Fo	2	..	38063i
14	765	44.9	+ 6 48	7.05	7.11	A2	7	..	38075i	64	952	45.3	- 8 44	9.3	10.1	G5	2	..	12685b
15	825	44.9	+ 1 31	9.1	9.4	Fo	2	..	38063i	65	977	45.3	-11 54	10.6	11.4	G5	3	..	24605b
16	1032	44.9	- 2 39	8.3	8.6	Fo	5	2,2	14949b	66	319	45.3	-72 19	8.6	9.8	K5	2	..	20540b
17	949	44.9	- 8 45	8.9	8.9	Ao	5	..	12685b	67	362	45.4	+66 46	8.4	8.4	B9	5	..	38907i
18	974	44.9	-11 25	10.5	11.6	K2	1	..	24605b	68	843	45.4	+60 24	8.8	8.8	Ao	2	..	38136i
19	920	44.9	-22 4	8.0	9.0	Ko	6	0,5	23810b	69	733	45.4	+ 7 50	7.30	7.72	F5	4	..	38075i
20	1561	44.9	-43 12	9.2	10.7	K2	1	..	20647b	70	734	45.4	+ 7 31	8.6	9.0	F5	2	..	38075i
21	1505	44.9	-50 2	10.1	10.1	Go	2	..	38400b	71	762	45.4	+ 4 8	8.4	8.9	F8	4	..	38083i
22	153	44.9	-79 30	9.1	10.1	Ko	1	..	15162b	72	1024	45.4	-10 27	9.2	10.0	G5	3	..	24605i
23	987	45.0	+51 22	8.0	8.6	Go	4	..	38125i	73	2042	45.4	-30 59	9.2	10.0	Go	2	..	46020b
24	1066	45.0	+40 47	8.8	8.8	A	2	..	38088i	74	2043	45.4	-31 36	8.5	8.5	G5	6	5,8	20533b
25	791	45.0	+19 37	9.5	9.6	A3	1	..	38153i	75	1692	45.4	-45 11	9.5	9.8	F2	2	..	42090b
26	725	45.0	+14 3	8.9	9.5	Go	2	..	38920i	76	1519	45.4	-47 48	9.1	9.2	A2	5	..	38400b
27	686	45.0	+ 3 31	8.0	8.1	A2	6	..	38063i	77	1262	45.4	-51 16	9.1	9.8	Fo	3	..	38400b
28	786	45.0	+ 2 6	8.8	8.9	A2	3	..	15135b	78	154	45.4	-78 59	9.0	9.6	Go	3	..	15162b
29	1002	45.0	-12 12	8.1	8.1	Ao	9	..	24605b	79	916	45.5	+36 3	8.0	8.1	A2	4	..	38934i
30	871	45.0	-15 47	8.7	9.0	F2	5	..	12628b	80	743	45.5	+18 40	5.12	5.40	Fo	..	5,R	56,78
31	924	45.0	-22 54	8.6	9.0	Ao	4	..	17402b	81	954	45.5	- 4 2	7.67	8.67	Ko	6	..	14949b
32	2183	45.0	-23 13	7.9	9.0	K2	5	2,5	17402b	82	1005	45.5	-12 2	10.0	11.1	K2	1	..	24605b
33	1766	45.0	-28 54	8.1	9.4	G5	3	..	20533b	83	1004	45.5	-12 29	9.1	10.1	Ko	5	..	24605b
34	729	45.0	-55 57	8.0	9.4	Ko	3	..	42691b	84	984	45.5	-13 26	9.3	9.6	F2	4	..	24605b
35	486	45.1	+64 30	10.2	10.2	A	1	..	38907i	85	2603	45.5	-24 3	9.7	10.0	Ko	1	..	17402b
36	995	45.1	+45 46	6.69	7.19	F8	4	2,8	2219b	86	1893	45.5	-34 29	6.98	8.0	G5	6	..	41080b
37	695	45.1	+24 7	8.7	9.1	F5	3	..	38153i	87	1940	45.5	-35 15	7.80	8.0	F5	7	..	20526b
38	692	45.1	+16 3	7.28	7.78	F8	5	..	37544i	88	1720	45.5	-44 9	6.56	8.0	G5	10	..	42090b
39	777	45.1	+ 8 44	4.35	4.35	Ao	..	R	56,78	89	1446	45.5	-49 52	10.6	10.2	Go	2	..	38400b
40	976	45.1	-11 2	10.5	10.8	F2	2	..	24605b	90	380	45.5	-59 18	6.76	8.0	Ko	6	..	42691b
41	1003	45.1	-11 55	8.0	9.2	K5	7	..	24605b	91	341	45.5	-60 47	7.3	8.3	Go	6	..	42691b
42	982	45.1	-13 17	9.6	10.4	G5	3	..	24605b	92	785	45.6	+58 28	8.0	8.0	B9	5	..	38970i
43	970	45.1	-13 56	6.30	6.64	F2	6	..	20232b	93	1090	45.6	+39 7	8.0	9.2	K5	3	..	38934i
44	960	45.1	-15 59	8.7	9.1	F5	5	..	12628b	94	948	45.6	+36 27	6.87	7.87	Ko	4	..	37260i
45	942	45.1	-20 4	9.38	10.0	Ko	2	..	17402b	95	916	45.6	+34 16	7.7	7.8	A2	6	1,4	37387i
46	1894	45.1	-36 11	9.5	9.5	F2	3	..	20526b	96	871	45.6	+ 0 59	6.62	6.68	A2	8	..	38063i
47	1903	45.1	-37 37	8.5	8.9	F5	5	..	20526b	97	903	45.6	- 3 6	8.7	9.7	Ko	4	5,1	14949b
48	1563	45.1	-43 48	9.1	9.3	A2	5	..	42090b	98	955	45.6	- 4 17	8.6	8.6	Ao	3	..	14949b
49	369	45.1	-63 44	8.5	9.3	G5	4	..	20430b	99	985	45.6	-13 20	10.0	10.6	Go	3	..	24605b
50	328	45.2	+70 18	9.4	9.4	A	1	..	38112i	100	973	45.6	-13 59	9.8	10.9	K2	3	..	24605b

THE HENRY DRAPER CATALOGUE.

30800

4^h 45^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	963	45.6	-15 58	6.82	7.82	Ko	4	0,8	20232b	51	1513	46.0	-50 29	10.3	10.1	Go	2	..	38400b
2	990	45.6	-21 8	9.3	10.0	Go	2	..	17402b	52	732	46.0	-56 11	8.5	9.4	Fo	3	..	42691b
3	1510	45.6	-50 11	9.3	9.8	G5	2	..	38400b	53	845	46.1	+60 55	8.6	8.7	A2	3	..	38136i
4	696	45.6	-57 19	8.8	9.8	Fo	2	..	42691b	54	1104	46.1	+43 39	8.4	9.2	G5	2	..	38088i
5	320	45.6	-66 15	7.6	7.9	Fo	8	..	20430b	55	1059	46.1	-5 48	9.1	9.6	F8	3	..	12685b
6	279	45.7	+71 44	8.9	9.7	G5	1	..	38112i	56	2616	46.1	-24 32	8.0	9.1	G5	6	..	17402b
7	938	45.7	+55 53	8.7	8.7	Ao	2	..	38970i	57	1859	46.1	-26 3	8.7	9.7	G5	2	..	20533b
8	696	45.7	+15 43	8.2	9.0	G5	2	..	38920i	58	1860	46.1	-26 19	8.7	10.0	G5	1	..	20533b
9	695	45.7	+15 17	7.8	8.3	F8	3	..	37544i	59	2052	46.1	-31 8	7.7	8.8	Ko	7	..	20533b
10	654	45.7	+10 54	6.96	7.38	F5	6	..	37544i	60	1565	46.1	-46 43	9.9	9.8	F8	3	..	38400b
11	829	45.7	+1 44	8.4	8.4	Ao	4	..	15135b	61	1526	46.1	-47 18	7.4	7.8	Ao	10	..	38400b
12	785	45.7	-0 16	7.35	8.35	Ko	5	..	38063i	62	1514	46.1	-50 3	8.15	8.6	F5	6	..	38400b
13	986	45.7	-13 44	8.7	9.9	K5	6	..	24605b	63	1266	46.1	-50 59	9.1	10.7	K2	2	..	38400b
14	964	45.7	-16 23	5.16	6.16	Ko	8	..	20232b	64	425	46.1	-58 32	8.3	9.3	G5	4	..	42691b
15	2001	45.7	-32 4	11.0	9.7	A2	2	..	46020b	65	367	46.1	-61 39	7.0	7.3	Fo	7	..	42691b
16	1635	45.7	-42 11	9.1	9.2	Fo	3	..	42090b	66	330	46.2	+70 30	8.7	9.9	K5	1	..	38112i
17	1522	45.7	-47 50	9.9	10.4	F5	2	..	38400b	67	741	46.2	+61 54	8.6	9.8	K5	3	..	38907i
18	321	45.7	-66 42	9.1	9.5	F5	5	..	20430b	68	800	46.2	+17 22	var.	var.	Md	..	R	56,199
19	291	45.7	-76 26	9.3	9.3	Ao	3	..	46167b	69	728	46.2	+13 29	6.70	7.12	F5	7	..	37544i
20	329	45.8	+71 0	8.9	9.9	Ko	2	..	38165i	70	668	46.2	+9 49	6.08	5.96	B5	..	0,8	56,78
21	711	45.8	+62 59	9.5	9.5	Ao	2	..	38907i	71	956	46.2	-8 21	8.7	9.9	K5	2	..	12685b
22	740	45.8	+61 36	9.5	9.5	Ao	3	..	38907i	72	1005	46.2	-9 45	10.0	10.4	F5	2	..	24605b
23	1081	45.8	+42 25	5.62	5.62	Ao	7	0,10	2219b	73	874	46.2	-15 44	8.7	9.7	Ko	5	..	12628b
24	949	45.8	+36 19	8.7	9.8	K2	2	..	38934i	74	1022	46.2	-19 14	8.8	9.0	A5	4	0,3	17402b
25	732	45.8	+31 0	6.82	7.60	G5	7	..	37387i	75	1895	46.2	-34 47	9.7	10.4	Go	3	..	46020b
26	750	45.8	+23 11	8.2	8.2	Ao	4	..	38153i	76	1948	46.2	-35 16	7.58	8.3	Ko	6	..	20526b
27	744	45.8	+5 39	8.4	8.4	Ao	4	..	15135b	77	1639	46.2	-42 35	7.3	7.8	Ao	8	..	42090b
28	2610	45.8	-24 12	10.2	10.6	K	1	..	17402b	78	1724	46.2	-44 59	9.62	9.8	F5	2	..	42090b
29	1957	45.8	-33 16	8.5	8.6	F8	4	E	41080b	79	581	46.2	-52 48	8.9	9.2	Go	4	..	41013b
30	1944	45.8	-35 19	10.1	11.1	G5	3	..	46020b	80	370	46.2	-63 0	7.8	7.9	A5	7	..	20430b
31	1583	45.8	-41 39	9.5	10.6	G5	1	..	20647b	81	66	46.3	+86 10	7.96	7.94	B9	5	..	37546i
32	1524	45.8	-47 39	9.5	10.1	Go	3	..	38400b	82	1064	46.3	+47 47	8.4	9.4	Ko	3	..	38125i
33	1264	45.9	+49 29	8.9	8.9	Ao	1	..	38125i	83	996	46.3	+41 57	8.9	8.9	Ao	3	..	38088i
34	952	45.9	+36 33	5.04	6.11	K2	8	..	37260i	84	917	46.3	+35 38	8.4	8.4	Ao	5	..	38934i
35	741	45.9	+7 16	8.8	9.2	F5	1	..	38075i	85	752	46.3	+23 36	9.0	10.0	Ko	2	..	38153i
36	745	45.9	+5 26	3.78	3.61	B3	..	R	28,197	86	745	46.3	+18 43	9.8	9.8	Ao	1	..	38920i
37	830	45.9	+1 33	9.1	9.4	F2	4	..	15135b	87	776	46.3	+14 14	10.1	10.1	A	..	..	M
38	787	45.9	-0 4	9.28	9.28	Ao	2	..	12390b	88	659	46.3	+10 59	9.3	9.3	Ao	1	..	38204i
39	1002	45.9	-9 43	8.2	8.2	Ao	5	..	12685b	89	691	46.3	+4 1	8.8	9.3	F8	3	..	15135b
40	301	45.9	-74 50	9.0	10.0	Ko	2	..	15162b	90	1026	46.3	-9 57	8.71	9.21	F8	4	3,8	12685b
41	178	46.0	+77 36	7.64	8.14	F8	6	2,4	37558i	91	2029	46.3	-30 26	7.99	9.2	K2	5	..	20533b
42	821	46.0	+31 49	7.42	7.50	A3	5	3,4	37387i	92	1896	46.3	-34 53	9.45	11.0	G5	2	..	46020b
43	797	46.0	+17 32	9.07	9.57	F8	2	..	38920i	93	1640	46.3	-42 8	7.7	8.2	F5	6	..	42090b
44	687	46.0	+3 48	8.6	9.6	Ko	1	..	15135b	94	1570	46.3	-43 31	9.5	9.8	F5	2	..	20647b
45	979	46.0	-11 28	10.9	11.2	F2	2	..	24605b	95	698	46.3	-56 59	7.5	9.2	K2	4	..	42691b
46	2615	46.0	-24 50	9.00	9.4	Ko	3	..	17402b	96	954	46.4	+36 12	9.0	9.0	Ao	2	R	38934i
47	1586	46.0	-41 45	7.5	8.8	Ko	5	..	42090b	97	751	46.4	+6 1	8.4	9.4	Ko	1	..	38075i
48	1637	46.0	-42 33	7.3	7.8	A2	9	..	42090b	98	788	46.4	-0 43	7.8	7.9	A2	6	..	38063i
49	1449	46.0	-49 20	8.6	9.5	A5	7	..	38400b	99	908	46.4	-3 19	8.5	9.3	G5	3	..	14949b
50	1512	46.0	-49 58	7.62	8.0	G5	8	..	38400b	100	1007	46.4	-12 25	9.3	10.3	Ko	3	..	24605b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

30900

4^h 46^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	989	46.4	-13 38	9.6	10.7	K2	3	..	24605b	51	1869	46.8	-26 17	7.7	9.1	Ko	6	..	20533b
2	1023	46.4	-19 4	7.66	9.0	K2	5	2,5	12628b	52	1909	46.8	-29 56	8.49	8.6	Go	5	..	20533b
3	2196	46.4	-23 28	9.5	10.0	Ko	2	..	17402b	53	1527	46.8	-48 38	9.9	10.2	Go	2	..	38400b
4	1864	46.4	-26 11	9.2	10.0	K	1	..	20533b	54	322	46.8	-66 11	9.2	9.3	A2	5	..	20430b
5	1788	46.4	-28 45	9.1	9.8	Go	2	..	20533b	55	276	46.8	-68 55	9.2	9.6	F5	4	..	20430b
6	2055	46.4	-31 22	9.2	9.7	G5	2	..	46020b	56	316	46.8	-70 20	9.5	9.5	Ao	2	..	20540b
7	1589	46.4	-41 39	9.7	10.0	Ko	2	..	20647b	57	487	46.9	+64 15	8.6	9.6	Ko	2	..	38907i
8	1641	46.4	-42 46	8.6	8.6	Go	4	..	42090b	58	941	46.9	+55 6	5.58	5.58	Ao	..	..	56,78
9	1694	46.4	-45 20	8.3	8.9	Ko	5	..	42090b	59	777	46.9	+14 5	5.19	6.54	Ma	9	R	37544i
10	1525	46.4	-48 35	9.9	10.7	Go	3	..	38400b	60	671	46.9	+9 10	7.9	8.9	Ko	3	..	38075i
11	186	46.5	+76 20	8.9	9.0	A3	2	..	37558i	61	768	46.9	+4 31	8.2	9.2	Ko	2	..	38083i
12	701	46.5	+27 44	5.91	6.25	F2	9	..	37387i	62	960	46.9	-8 34	7.05	7.05	Ao	4	0,7	2298b
13	669	46.5	+9 43	6.82	7.16	F2	5	..	38075i	63	1028	46.9	-10 27	7.11	7.09	B9	3	..	2298b
14	909	46.5	-3 50	7.46	8.53	K2	6	..	14949b	64	937	46.9	-18 30	8.7	9.9	K5	1	..	12628b
15	981	46.5	-11 2	8.1	9.1	Ko	7	..	24605b	65	2059	46.9	-31 45	9.7	10.0	F8	2	..	46020b
16	982	46.5	-11 8	8.7	8.7	Ao	8	..	24605b	66	1904	46.9	-34 21	8.6	8.9	G5	4	..	20526b
17	990	46.5	-13 51	9.6	9.9	F2	4	..	24605b	67	1912	46.9	-37 15	8.5	9.5	Ko	4	..	20526b
18	1930	46.5	-27 16	7.60	8.8	Ko	8	..	20533b	68	1592	46.9	-41 45	8.9	9.2	F5	3	..	42090b
19	1642	46.5	-42 1	7.5	9.1	K2	3	..	42090b	69	277	46.9	-68 43	7.4	7.9	F8	9	..	20430b
20	1643	46.5	-42 25	9.2	10.5	Ko	2	..	20647b	70	275	46.9	-72 59	8.8	9.3	F8	3	..	20540b
21	1725	46.5	-44 14	9.5	9.8	F5	2	..	42090b	71	998	47.0	+41 52	8.8	9.1	F	1	..	38088i
22	1727	46.5	-44 39	9.5	10.4	Ko	1	..	42090b	72	1077	47.0	+40 15	8.2	8.7	F8	3	..	38088i
23	712	46.6	+62 7	9.7	10.5	G5	2	..	38907i	73	717	47.0	+22 5	8.7	9.7	Ko	2	..	38153i
24	1265	46.6	+49 24	7.88	8.44	Go	4	2,2	38125i	74	778	47.0	+14 28	7.8	8.4	Go	3	..	37544i
25	917	46.6	+34 32	8.2	8.8	Go	4	..	38934i	75	753	47.0	+5 31	8.2	9.0	G5	1	..	38075i
26	876	46.6	+1 5	8.19	8.69	F8	3	..	38063i	76	837	47.0	+1 43	8.0	8.1	A3	5	..	38063i
27	2057	46.6	-31 56	10.9	10.1	Go	1	..	46020b	77	835	47.0	+1 21	8.0	9.1	K2	3	..	38063i
28	1908	46.6	-36 31	8.6	9.9	Ko	3	..	20526b	78	878	47.0	+0 34	8.8	8.9	A2	2	..	14949b
29	1696	46.6	-45 10	8.6	9.5	Ko	3	..	42090b	79	790	47.0	+0 8	8.4	9.4	Ko	3	0,2	12390b
30	1518	46.6	-50 0	9.7	10.1	Fo	4	..	38400b	80	961	47.0	-8 1	8.8	8.8	Ao	4	..	12685b
31	1517	46.6	-50 4	10.6	10.7	G	2	..	38400b	81	1010	47.0	-12 7	8.1	8.9	G5	10	..	24605b
32	156	46.7	+80 38	9.4	9.4	Ao	4	..	37558i	82	993	47.0	-21 18	9.3	10.3	Ko	1	..	17402b
33	280	46.7	+71 15	8.6	9.7	K2	1	..	38112i	83	2080	47.0	-25 28	6.94	7.3	Ao	10	..	20533b
34	787	46.7	+58 41	7.9	8.9	Ko	3	0,2	38136i	84	1931	47.0	-27 41	8.3	8.9	F5	5	..	20533b
35	1173	46.7	+48 26	8.9	9.7	G5	2	..	38125i	85	1593	47.0	-41 29	6.02	7.0	Fo	10	..	42090b
36	800	46.7	+19 57	8.75	9.75	Ko	1	..	38920i	86	321	47.0	-72 40	8.6	9.8	K5	1	..	20540b
37	766	46.7	+4 22	8.8	9.9	K2	4	..	46195b	87	1044	47.1	+44 34	8.0	8.3	Fo	2	..	38088i
38	911	46.7	-3 7	8.7	9.7	Ko	2	..	14949b	88	999	47.1	+42 2	8.1	9.1	Ko	2	..	38088i
39	1656	46.7	-39 21	8.1	9.4	F5	5	..	20526b	89	667	47.1	+12 14	7.25	7.20	B8	6	..	37544i
40	1528	46.7	-47 13	9.9	10.6	G5	2	..	38400b	90	673	47.1	+9 40	7.70	8.70	Ko	2	..	38075i
41	1529	46.7	-47 45	9.7	10.2	F5	2	..	38400b	91	915	47.1	-6 59	9.1	9.2	A5	3	..	12685b
42	1519	46.7	-50 5	9.20	10.7	G5	2	..	38400b	92	1029	47.1	-10 38	10.5	10.9	F5	2	..	24605b
43	957	46.8	+36 40	6.80	7.58	G5	6	0,4	37365i	93	995	47.1	-13 12	9.3	10.3	Ko	4	..	24605b
44	704	46.8	+27 56	8.2	8.6	F5	4	..	37387i	94	996	47.1	-13 34	8.9	9.0	A2	3	..	20232b
45	759	46.8	+26 37	7.84	8.91	K2	3	..	37387i	95	972	47.1	-15 57	9.3	10.3	Ko	3	..	24605b
46	802	46.8	+17 11	9.08	9.64	Go	2	2,1	38920i	96	1907	47.1	-34 24	9.4	11.3	G5	2	..	46020b
47	832	46.8	+1 13	8.66	9.22	Go	3	2,1	46195b	97	1762	47.1	-38 44	7.06	7.7	F5	10	..	20526b
48	1062	46.8	-5 32	8.3	8.3	Ao	6	..	14949b	98	1658	47.1	-39 40	8.5	8.2	Ao	8	..	20526b
49	1027	46.8	-10 36	10.0	11.1	K2	2	..	24605b	99	1529	47.1	-48 29	7.9	8.9	G5	6	..	38400b
50	993	46.8	-13 53	9.6	10.8	K5	3	..	24605b	100	958	47.2	+36 37	7.52	8.30	G5	4	..	37365i

THE HENRY DRAPER CATALOGUE.

31000

4^h 47^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	702	47.2	+24 44	8.8	9.3	F8	3	..	38153i	51	584	47.5	-52 27	8.9	10.1	Ko	3	..	41013b
2	789	47.2	+ 8 12	8.8	9.8	Ko	1	..	38204i	52	705	47.5	-57 16	8.6	9.2	F5	3	..	42691b
3	769	47.2	+ 4 10	8.5	8.9	F5	3	..	15135b	53	50	47.5	-85 0	8.8	10.2	Mb	3	..	20538b
4	1011	47.2	-12 54	8.3	8.3	Ao	2	..	20232b	54	159	47.6	+79 46	8.9	9.7	G5	2	..	37558i
5	1873	47.2	-26 0	9.4	9.4	Fo	4	..	20533b	55	714	47.6	+62 29	9.2	10.4	K5	1	..	38907i
6	1909	47.2	-34 11	9.7	9.9	K5	1	..	20526b	56	917	47.6	- 7 52	7.52	8.30	G5	6	..	12685b
7	1574	47.2	-46 21	8.6	9.5	Ko	4	..	38400b	57	963	47.6	- 8 3	8.1	8.1	Ao	7	..	12685b
8	1531	47.2	-48 55	10.1	10.7	F5	2	..	38400b	58	964	47.6	- 8 51	8.8	9.3	F8	4	..	12685b
9	734	47.2	-56 50	7.0	8.5	Ma	5	..	42691b	59	986	47.6	-11 8	10.2	10.7	F8	4	..	24605b
10	372	47.2	-63 39	7.2	8.2	Ko	7	..	20430b	60	984	47.6	-11 35	10.6	11.6	Ko	2	..	24605b
11	326	47.2	-66 17	9.4	9.9	F8	2	..	20430b	61	1012	47.6	-12 32	10.2	11.2	Ko	2	..	24605b
12	302	47.2	-74 29	9.0	9.8	G5	2	..	15162b	62	2212	47.6	-23 50	10.6	10.2	F5	1	..	17402b
13	126	47.2	-80 56	8.9	9.2	Fo	3	..	20557b	63	1970	47.6	-33 4	9.1	10.6	K2	1	..	46020b
14	357	47.3	+67 38	7.14	7.09	B8	6	0,7	36654i	64	1274	47.6	-51 52	8.7	8.9	F2	5	..	38400b
15	1175	47.3	+48 53	8.7	9.7	Ko	2	..	38125i	65	719	47.6	-54 37	7.84	8.5	B8	8	..	41013b
16	999	47.3	+45 31	8.17	8.73	Go	3	..	38088i	66	348	47.6	-67 25	9.4	9.9	F8	3	..	20430b
17	1078	47.3	+40 49	9.5	9.5	A	1	..	38088i	67	439	47.7	+65 8	6.78	7.56	G5	4	..	36654i
18	756	47.3	+24 2	7.7	8.2	F8	6	..	38153i	68	1087	47.7	+50 22	9.0	9.0	Ao	1	..	38125i
19	881	47.3	+ 0 48	8.8	9.9	K2	2	..	46195b	69	1116	47.7	+43 54	5.98	5.96	B9	9	..	38088i
20	1049	47.3	- 2 47	8.8	9.8	Ko	1	..	14949b	70	824	47.7	+32 2	8.6	8.9	Fo	2	..	37387i
21	917	47.3	- 3 20	8.1	8.1	Ao	6	..	17409b	71	758	47.7	+23 26	7.44	8.44	Ko	6	..	38153i
22	974	47.3	-16 58	9.1	10.3	K5	1	..	45972b	72	747	47.7	+18 54	7.6	8.8	K5	3	..	38153i
23	933	47.3	-22 29	8.5	9.6	F8	3	..	17402b	73	793	47.7	- 0 3	8.88	8.94	A2	3	0,2	12390b
24	2018	47.3	-32 30	10.1	10.3	Ko	1	..	46020b	74	1913	47.7	-36 54	9.1	11.1	K5	2	5,1	46020b
25	1659	47.3	-39 11	9.5	10.5	K	1	..	20526b	75	1615	47.7	-39 58	9.40	9.4	F5	4	5,3	20647b
26	1594	47.3	-41 12	8.9	9.4	G5	2	..	42090b	76	1706	47.7	-45 50	7.6	8.6	F5	8	..	38400b
27	718	47.3	-54 3	7.3	8.6	G5	7	..	41013b	77	1578	47.7	-46 14	9.2	9.5	Fo	4	..	38400b
28	344	47.3	-60 25	6.95	8.3	Ko	6	..	42691b	78	759	47.7	-53 27	8.6	9.4	F8	4	..	41013b
29	373	47.3	-63 55	8.8	9.8	Ko	3	..	20430b	79	374	47.7	-63 9	8.9	8.9	Ao	5	..	20430b
30	896	47.4	+52 53	8.9	8.9	Ao	3	..	38970i	80	284	47.7	-71 17	8.2	9.0	G5	4	..	20540b
31	993	47.4	+51 54	8.7	8.7	Ao	2	..	38970i	81	294	47.7	-76 29	7.7	8.1	F5	9	..	15162b
32	992	47.4	+51 26	6.89	6.89	Ao	5	..	14302i	82	132	47.8	+82 22	8.7	9.7	Ko	2	..	37558i
33	746	47.4	+25 13	7.21	7.21	Ao	7	..	38153i	83	996	47.8	+51 41	8.0	8.0	Ao	5	..	38970i
34	742	47.4	- 1 12	8.2	8.5	Fo	2	..	38063i	84	1117	47.8	+43 13	8.0	8.6	Go	2	..	38088i
35	1660	47.4	-39 1	9.9	9.7	A3	3	0,3	20526b	85	1002	47.8	+41 36	8.0	8.3	F2	3	..	38088i
36	1611	47.4	-40 22	8.6	9.9	Ma	2	0,1-	20647b	86	770	47.8	+22 37	9.8	9.8	A	..	R	M
37	95	47.4	-82 47	9.4	10.4	Ko	2	..	20557b	87	793	47.8	+ 8 24	7.8	7.9	A2	4	..	38075i
38	1000	47.5	+45 33	8.0	8.4	F5	3	..	38088i	88	1067	47.8	- 5 27	8.1	8.6	F8	3	..	17409b
39	757	47.5	+23 10	6.65	7.65	Ko	8	..	38153i	89	1032	47.8	-10 39	7.9	7.9	B9	5	..	2298b
40	771	47.5	+ 4 15	9.1	9.4	Fo	3	..	46195b	90	987	47.8	-11 48	9.8	10.2	F5	5	..	24605b
41	799	47.5	+ 2 32	9.1	9.2	A2	3	..	46195b	91	1004	47.8	-13 26	7.6	7.7	A3	2	..	20232b
42	983	47.5	-11 1	10.5	11.5	Ko	2	..	24605b	92	883	47.8	-15 3	8.50	9.28	G5	7	..	24605b
43	880	47.5	-15 13	8.1	9.1	Ko	5	..	24605b	93	1962	47.8	-35 4	5.82	6.1	Ao	..	..	56,121
44	947	47.5	-20 34	9.3	9.9	F8	2	..	17402b	94	585	47.8	-52 35	9.0	9.6	Go	3	..	41013b
45	2634	47.5	-24 32	8.2	9.4	K2	3	..	17402b	95	93	47.9	+85 3	8.48	9.48	Ko	2	..	38330i
46	2019	47.5	-32 8	9.1	9.7	Go	3	..	46020b	96	282	47.9	+71 28	8.0	8.0	Ao	4	..	37630i
47	1967	47.5	-33 57	10.3	10.1	Go	2	..	46020b	97	548	47.9	+63 15	8.5	9.6	K2	2	..	38907i
48	1914	47.5	-34 36	10.1	11.5	Go	1	..	46020b	98	1091	47.9	+42 46	7.9	9.0	K2	3	..	38088i
49	1533	47.5	-48 11	9.1	10.7	G5	3	..	38400b	99	749	47.9	+ 7 31	8.4	8.4	Ao	2	..	38204i
50	1273	47.5	-51 0	9.5	10.7	F8	2	..	38400b	100	1011	47.9	- 6 31	8.3	8.4	A2	6	..	12685b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

30900

4^h 46^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	989	46.4	-13 38	9.6	10.7	K ₂	3	..	24605b	51	1869	46.8	-26 17	7.7	9.1	K ₀	6	..	20533b
2	1023	46.4	-19 4	7.66	9.0	K ₂	5	2,5	12628b	52	1909	46.8	-29 56	8.49	8.6	Go	5	..	20533b
3	2196	46.4	-23 28	9.5	10.0	K ₀	2	..	17402b	53	1527	46.8	-48 38	9.9	10.2	Go	2	..	38400b
4	1864	46.4	-26 11	9.2	10.0	K	1	..	20533b	54	322	46.8	-66 11	9.2	9.3	A ₂	5	..	20430b
5	1788	46.4	-28 45	9.1	9.8	Go	2	..	20533b	55	276	46.8	-68 55	9.2	9.6	F ₅	4	..	20430b
6	2055	46.4	-31 22	9.2	9.7	G ₅	2	..	46020b	56	316	46.8	-70 20	9.5	9.5	A ₀	2	..	20540b
7	1589	46.4	-41 39	9.7	10.0	K ₀	2	..	20647b	57	487	46.9	+64 15	8.6	9.6	K ₀	2	..	38907i
8	1641	46.4	-42 46	8.6	8.6	Go	4	..	42090b	58	941	46.9	+55 6	5.58	5.58	A ₀	..	..	56,78
9	1694	46.4	-45 20	8.3	8.9	K ₀	5	..	42090b	59	777	46.9	+14 5	5.19	6.54	Ma	9	R	37544i
10	1525	46.4	-48 35	9.9	10.7	Go	3	..	38400b	60	671	46.9	+9 10	7.9	8.9	K ₀	3	..	38075i
11	186	46.5	+76 20	8.9	9.0	A ₃	2	..	37558i	61	768	46.9	+4 31	8.2	9.2	K ₀	2	..	38083i
12	701	46.5	+27 44	5.91	6.25	F ₂	9	..	37387i	62	960	46.9	-8 34	7.05	7.05	A ₀	4	0,7	2298b
13	669	46.5	+9 43	6.82	7.16	F ₂	5	..	38075i	63	1028	46.9	-10 27	7.11	7.09	B ₉	3	..	2298b
14	909	46.5	+3 50	7.46	8.53	K ₂	6	..	14949b	64	937	46.9	-18 30	8.7	9.9	K ₅	1	..	12628b
15	981	46.5	-11 2	8.1	9.1	K ₀	7	..	24605b	65	2059	46.9	-31 45	9.7	10.0	F ₈	2	..	46020b
16	982	46.5	-11 8	8.7	8.7	A ₀	8	..	24605b	66	1904	46.9	-34 21	8.6	8.9	G ₅	4	..	20526b
17	990	46.5	-13 51	9.6	9.9	F ₂	4	..	24605b	67	1912	46.9	-37 15	8.5	9.5	K ₀	4	..	20526b
18	1930	46.5	-27 16	7.60	8.8	K ₀	8	..	20533b	68	1592	46.9	-41 45	8.9	9.2	F ₅	3	..	42090b
19	1642	46.5	-42 1	7.5	9.1	K ₂	3	..	42090b	69	277	46.9	-68 43	7.4	7.9	F ₈	9	..	20430b
20	1643	46.5	-42 25	9.2	10.5	K ₀	2	..	20647b	70	275	46.9	-72 59	8.8	9.3	F ₈	3	..	20540b
21	1725	46.5	-44 14	9.5	9.8	F ₅	2	..	42090b	71	998	47.0	+41 52	8.8	9.1	F	1	..	38088i
22	1727	46.5	-44 39	9.5	10.4	K ₀	1	..	42090b	72	1077	47.0	+40 15	8.2	8.7	F ₈	3	..	38088i
23	712	46.6	+62 7	9.7	10.5	G ₅	2	..	38907i	73	717	47.0	+22 5	8.7	9.7	K ₀	2	..	38153i
24	1265	46.6	+49 24	7.88	8.44	Go	4	2,2	38125i	74	778	47.0	+14 28	7.8	8.4	Go	3	..	37544i
25	917	46.6	+34 32	8.2	8.8	Go	4	..	38934i	75	753	47.0	+5 31	8.2	9.0	G ₅	1	..	38075i
26	876	46.6	+1 5	8.19	8.69	F ₈	3	..	38063i	76	837	47.0	+1 43	8.0	8.1	A ₃	5	..	38063i
27	2057	46.6	-31 56	10.9	10.1	Go	1	..	46020b	77	835	47.0	+1 21	8.0	9.1	K ₂	3	..	38063i
28	1908	46.6	-36 31	8.6	9.9	K ₀	3	..	20526b	78	878	47.0	+0 34	8.8	8.9	A ₂	2	..	14949b
29	1696	46.6	-45 10	8.6	9.5	K ₀	3	..	42090b	79	790	47.0	-0 8	8.4	9.4	K ₀	3	0,2	12390b
30	1518	46.6	-50 0	9.7	10.1	F ₀	4	..	38400b	80	961	47.0	-8 1	8.8	8.8	A ₀	4	..	12685b
31	1517	46.6	-50 4	10.6	10.7	G	2	..	38400b	81	1010	47.0	-12 7	8.1	8.9	G ₅	10	..	24605b
32	156	46.7	+80 38	9.4	9.4	A ₀	4	..	37558i	82	993	47.0	-21 18	9.3	10.3	K ₀	1	..	17402b
33	280	46.7	+71 15	8.6	9.7	K ₂	1	..	38112i	83	2080	47.0	-25 28	6.94	7.3	A ₀	10	..	20533b
34	787	46.7	+58 41	7.9	8.9	K ₀	3	0,2	38136i	84	1931	47.0	-27 41	8.3	8.9	F ₅	5	..	20533b
35	1173	46.7	+48 26	8.9	9.7	G ₅	2	..	38125i	85	1593	47.0	-41 29	6.02	7.0	F ₀	10	..	42090b
36	800	46.7	+19 57	8.75	9.75	K ₀	1	..	38920i	86	321	47.0	-72 40	8.6	9.8	K ₅	1	..	20540b
37	766	46.7	+4 22	8.8	9.9	K ₂	4	..	46195b	87	1044	47.1	+44 34	8.0	8.3	F ₀	2	..	38088i
38	911	46.7	-3 7	8.7	9.7	K ₀	2	..	14949b	88	999	47.1	+42 2	8.1	9.1	K ₀	2	..	38088i
39	1656	46.7	-39 21	8.1	9.4	F ₅	5	..	20526b	89	667	47.1	+12 14	7.25	7.20	B ₈	6	..	37544i
40	1528	46.7	-47 13	9.9	10.6	G ₅	2	..	38400b	90	673	47.1	+9 40	7.70	8.70	K ₀	2	..	38075i
41	1529	46.7	-47 45	9.7	10.2	F ₅	2	..	38400b	91	915	47.1	-6 59	9.1	9.2	A ₅	3	..	12685b
42	1519	46.7	-50 5	9.20	10.7	G ₅	2	..	38400b	92	1029	47.1	-10 38	10.5	10.9	F ₅	2	..	24605b
43	957	46.8	+36 40	6.80	7.58	G ₅	6	0,4	37365i	93	995	47.1	-13 12	9.3	10.3	K ₀	4	..	24605b
44	704	46.8	+27 56	8.2	8.6	F ₅	4	..	37387i	94	996	47.1	-13 34	8.9	9.0	A ₂	3	..	20232b
45	759	46.8	+26 37	7.84	8.91	K ₂	3	..	37387i	95	972	47.1	-15 57	9.3	10.3	K ₀	3	..	24605b
46	802	46.8	+17 11	9.08	9.64	Go	2	2,1	38920i	96	1907	47.1	-34 24	9.4	11.3	G ₅	2	..	46020b
47	832	46.8	+1 13	8.66	9.22	Go	3	2,1	46195b	97	1762	47.1	-38 44	7.06	7.7	F ₅	10	..	20526b
48	1062	46.8	-5 32	8.3	8.3	A ₀	6	..	14949b	98	1658	47.1	-39 40	8.5	8.2	A ₀	8	..	20526b
49	1027	46.8	-10 36	10.0	11.1	K ₂	2	..	24605b	99	1529	47.1	-48 29	7.9	8.9	G ₅	6	..	38400b
50	993	46.8	-13 53	9.6	10.8	K ₅	3	..	24605b	100	958	47.2	+36 37	7.52	8.30	G ₅	4	..	37365i

THE HENRY DRAPER CATALOGUE.

31000

4^h 47^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	702	47.2	+24 44	8.8	9.3	F8	3	..	38153i	51	584	47.5	-52 27	8.9	10.1	Ko	3	..	41013b
2	789	47.2	+ 8 12	8.8	9.8	Ko	1	..	38204i	52	705	47.5	-57 16	8.6	9.2	F5	3	..	42691b
3	769	47.2	+ 4 10	8.5	8.9	F5	3	..	15135b	53	50	47.5	-85 0	8.8	10.2	Mb	3	..	20538b
4	1011	47.2	-12 54	8.3	8.3	Ao	2	..	20232b	54	159	47.6	+79 46	8.9	9.7	G5	2	..	37558i
5	1873	47.2	-26 0	9.4	9.4	Fo	4	..	20533b	55	714	47.6	+62 29	9.2	10.4	K5	1	..	38907i
6	1909	47.2	-34 11	9.7	9.9	K5	1	..	20526b	56	917	47.6	- 7 52	7.52	8.30	G5	6	..	12685b
7	1574	47.2	-46 21	8.6	9.5	Ko	4	..	38400b	57	963	47.6	- 8 3	8.1	8.1	Ao	7	..	12685b
8	1531	47.2	-48 55	10.1	10.7	F5	2	..	38400b	58	964	47.6	- 8 51	8.8	9.3	F8	4	..	12685b
9	734	47.2	-56 50	7.0	8.5	Ma	5	..	42691b	59	986	47.6	-11 8	10.2	10.7	F8	4	..	24605b
10	372	47.2	-63 39	7.2	8.2	Ko	7	..	20430b	60	984	47.6	-11 35	10.6	11.6	Ko	2	..	24605b
11	326	47.2	-66 17	9.4	9.9	F8	2	..	20430b	61	1012	47.6	-12 32	10.2	11.2	Ko	2	..	24605b
12	302	47.2	-74 29	9.0	9.8	G5	2	..	15162b	62	2212	47.6	-23 50	10.6	10.2	F5	1	..	17402b
13	126	47.2	-80 56	8.9	9.2	Fo	3	..	20557b	63	1970	47.6	-33 4	9.1	10.6	K2	1	..	46020b
14	357	47.3	+67 38	7.14	7.09	B8	6	0,7	36654i	64	1274	47.6	-51 52	8.7	8.9	F2	5	..	38400b
15	1175	47.3	+48 53	8.7	9.7	Ko	2	..	38125i	65	719	47.6	-54 37	7.84	8.5	B8	8	..	41013b
16	999	47.3	+45 31	8.17	8.73	Go	3	..	38088i	66	348	47.6	-67 25	9.4	9.9	F8	3	..	20430b
17	1078	47.3	+40 49	9.5	9.5	A	1	..	38088i	67	439	47.7	+65 8	6.78	7.56	G5	4	..	36654i
18	756	47.3	+24 2	7.7	8.2	F8	6	..	38153i	68	1087	47.7	+50 22	9.0	9.0	Ao	1	..	38125i
19	881	47.3	+ 0 48	8.8	9.9	K2	2	..	46195b	69	1116	47.7	+43 54	5.98	5.96	B9	9	..	38088i
20	1049	47.3	- 2 47	8.8	9.8	Ko	1	..	14949b	70	824	47.7	+32 2	8.6	8.9	Fo	2	..	37387i
21	917	47.3	- 3 20	8.1	8.1	Ao	6	..	17409b	71	758	47.7	+23 26	7.44	8.44	Ko	6	..	38153i
22	974	47.3	-16 58	9.1	10.3	K5	1	..	45972b	72	747	47.7	+18 54	7.6	8.8	K5	3	..	38153i
23	933	47.3	-22 29	8.5	9.6	F8	3	..	17402b	73	793	47.7	- 0 3	8.88	8.94	A2	3	0,2	12390b
24	2018	47.3	-32 30	10.1	10.3	Ko	1	..	46020b	74	1913	47.7	-36 54	9.1	11.1	K5	2	5,1	46020b
25	1659	47.3	-39 11	9.5	10.5	K	1	..	20526b	75	1615	47.7	-39 58	9.40	9.4	F5	4	5,3	20647b
26	1594	47.3	-41 12	8.9	9.4	G5	2	..	42090b	76	1706	47.7	-45 50	7.6	8.6	F5	8	..	38400b
27	718	47.3	-54 3	7.3	8.6	G5	7	..	41013b	77	1578	47.7	-46 14	9.2	9.5	Fo	4	..	38400b
28	344	47.3	-60 25	6.95	8.3	Ko	6	..	42691b	78	759	47.7	-53 27	8.6	9.4	F8	4	..	41013b
29	373	47.3	-63 55	8.8	9.8	Ko	3	..	20430b	79	374	47.7	-63 9	8.9	8.9	Ao	5	..	20430b
30	896	47.4	+52 53	8.9	8.9	Ao	3	..	38970i	80	284	47.7	-71 17	8.2	9.0	G5	4	..	20540b
31	993	47.4	+51 54	8.7	8.7	Ao	2	..	38970i	81	294	47.7	-76 29	7.7	8.1	F5	9	..	15162b
32	992	47.4	+51 26	6.89	6.89	Ao	5	..	14302i	82	132	47.8	+82 22	8.7	9.7	Ko	2	..	37558i
33	746	47.4	+25 13	7.21	7.21	Ao	7	..	38153i	83	996	47.8	+51 41	8.0	8.0	Ao	5	..	38970i
34	742	47.4	- 1 12	8.2	8.5	Fo	2	..	38063i	84	1117	47.8	+43 13	8.0	8.6	Go	2	..	38088i
35	1660	47.4	-39 1	9.9	9.7	A3	3	0,3	20526b	85	1002	47.8	+41 36	8.0	8.3	F2	3	..	38088i
36	1611	47.4	-40 22	8.6	9.9	Ma	2	0,1-	20647b	86	770	47.8	+22 37	9.8	9.8	A	..	R	M
37	95	47.4	-82 47	9.4	10.4	Ko	2	..	20557b	87	793	47.8	+ 8 24	7.8	7.9	A2	4	..	38075i
38	1000	47.5	+45 33	8.0	8.4	F5	3	..	38088i	88	1067	47.8	- 5 27	8.1	8.6	F8	3	..	17409b
39	757	47.5	+23 10	6.65	7.65	Ko	8	..	38153i	89	1032	47.8	-10 39	7.9	7.9	B9	5	..	2298b
40	771	47.5	+ 4 15	9.1	9.4	Fo	3	..	46195b	90	987	47.8	-11 48	9.8	10.2	F5	5	..	24605b
41	799	47.5	+ 2 32	9.1	9.2	A2	3	..	46195b	91	1004	47.8	-13 26	7.6	7.7	A3	2	..	20232b
42	983	47.5	-11 1	10.5	11.5	Ko	2	..	24605b	92	883	47.8	-15 3	8.50	9.28	G5	7	..	24605b
43	880	47.5	-15 13	8.1	9.1	Ko	5	..	24605b	93	1962	47.8	-35 4	5.82	6.1	Ao	..	..	56,121
44	947	47.5	-20 34	9.3	9.9	F8	2	..	17402b	94	585	47.8	-52 35	9.0	9.6	Go	3	..	41013b
45	2634	47.5	-24 32	8.2	9.4	K2	3	..	17402b	95	93	47.9	+85 3	8.48	9.48	Ko	2	..	38330i
46	2019	47.5	-32 8	9.1	9.7	Go	3	..	46020b	96	282	47.9	+71 28	8.0	8.0	Ao	4	..	37630i
47	1967	47.5	-33 57	10.3	10.1	Go	2	..	46020b	97	548	47.9	+63 15	8.5	9.6	K2	2	..	38907i
48	1914	47.5	-34 36	10.1	11.5	Go	1	..	46020b	98	1091	47.9	+42 46	7.9	9.0	K2	3	..	38088i
49	1533	47.5	-48 11	9.1	10.7	G5	3	..	38400b	99	749	47.9	+ 7 31	8.4	8.4	Ao	2	..	38204i
50	1273	47.5	-51 0	9.5	10.7	F8	2	..	38400b	100	1011	47.9	- 6 31	8.3	8.4	A2	6	..	12685b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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4^h 47^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1013	47.9	-12 1	11.1	11.4	F2	2	..	24605b	51	742	48.3	+61 36	6.90	7.46	Go	7	2,4	38907i
2	1005	47.9	-13 41	9.1	9.2	A3	7	..	24605b	52	846	48.3	+57 56	8.0	9.0	Ko	3	0,3	38136i
3	2069	47.9	-31 43	8.1	8.5	Go	6	0,7	20533b	53	664	48.3	+16 54	7.12	7.62	F8	6	..	37544i
4	1917	47.9	-34 25	11.5	11.5	Go	1	..	46020b	54	780	48.3	+14 49	8.9	9.5	Go	2	..	38920i
5	1278	47.9	-51 13	8.6	9.0	F8	6	..	38400b	55	888	48.3	+ 0 57	7.76	8.76	Ko	3	..	38063i
6	925	48.0	+36 3	8.7	8.7	Ao	1	..	38934i	56	1052	48.3	- 2 46	8.5	9.5	Ko	2	..	14949b
7	675	48.0	+ 9 21	9.1	9.4	F2	3	..	38204i	57	1013	48.3	- 9 43	8.3	9.4	K2	4	2,4	12685b
8	774	48.0	+ 6 48	8.5	8.6	A5	2	..	38075i	58	1008	48.3	-12 55	9.3	9.6	F2	5	..	24605b
9	1068	48.0	- 5 37	4.45	4.73	Fo	..	R	3099c	59	1000	48.3	-21 44	9.1	9.1	A2	4	..	17402b
10	919	48.0	- 7 49	8.5	8.6	A3	4	..	12685b	60	2646	48.3	-24 3	9.4	9.7	Go	2	..	17402b
11	966	48.0	- 8 49	9.1	9.1	Ao	4	E	12685b	61	1975	48.3	-33 33	9.9	10.0	Ko	2	..	46020b
12	1033	48.0	-10 42	9.8	10.3	F8	4	..	24605b	62	1967	48.3	-35 17	9.5	9.9	F5	1	..	20526b
13	1014	48.0	-12 18	8.7	9.7	Ko	8	..	24605b	63	1774	48.3	-38 46	7.56	7.7	A3	9	..	20526b
14	2218	48.0	-23 46	10.6	10.0	Ao	2	..	17402b	64	1538	48.3	-47 9	10.6	10.7	Ao	3	..	38400b
15	1807	48.0	-28 13	9.4	10.0	Go	1	..	20533b	65	278	48.3	-68 56	9.1	9.5	F5	3	..	20430b
16	1735	48.0	-44 2	9.1	9.5	Fo	3	..	42090b	66	999	48.4	+51 57	8.2	8.7	F8	1	..	14302i
17	1707	48.0	-45 5	9.12	9.0	Fo	5	..	42090b	67	1268	48.4	+49 34	8.6	9.7	K2	2	..	38125i
18	1124	48.1	+43 15	7.44	8.62	K5	4	..	38088i	68	759	48.4	+ 5 51	7.6	7.9	Fo	5	..	38075i
19	713	48.1	+28 39	8.8	9.2	F5	3	..	37387i	69	966	48.4	- 3 59	8.6	8.7	A5	4	..	14949b
20	771	48.1	+22 55	9.0	9.0	Ao	3	..	38153i	70	1015	48.4	- 6 31	8.9	9.7	G5	2	..	12685b
21	663a	48.1	+16 54	9.1	9.7	G	2	..	38920i	71	1921	48.4	-29 35	8.7	9.1	G5	5	..	20533b
22	698	48.1	+15 35	9.1	9.1	Ao	3	..	38920i	72	1543	48.4	-48 13	8.0	9.5	Ko	5	..	38400b
23	887	48.1	+ 0 15	8.8	9.6	G5	1	..	38183i	73	589	48.4	-52 47	8.2	9.2	G5	4	..	41013b
24	743	48.1	- 1 25	8.4	8.4	A	3	..	38063i	74	707	48.4	-57 54	8.7	9.4	F8	3	..	42691b
25	744	48.1	- 1 25	8.4	8.4	A	3	..	38063i	75	283	48.4	-75 18	9.0	9.5	F8	3	..	15162b
26	989	48.1	-11 52	10.5	10.9	F5	2	..	24605b	76	124	48.4	-81 0	10.0	10.4	F5	1	..	20557b
27	977	48.1	-17 2	8.9	8.9	Ao	5	..	12628b	77	788	48.5	+58 57	6.94	8.29	Ma	3	..	14302i
28	1935	48.1	-27 13	9.5	9.4	F5	3	..	20533b	78	1003	48.5	+41 58	8.0	8.8	G5	2	..	38088i
29	1973	48.1	-33 26	8.00	8.8	Ko	5	5,4	46020b	79	763	48.5	+23 47	8.4	8.5	A3	6	..	38153i
30	1920	48.1	-34 23	9.4	9.2	G5	2	..	20526b	80	721	48.5	+21 35	9.4	10.2	G5	2	..	38153i
31	1583	48.1	-43 13	7.4	8.6	F8	7	..	42090b	81	807	48.5	+17 27	9.8	10.3	F8	1	..	38920i
32	55	48.1	-84 34	8.9	9.9	Ko	3	..	20538b	82	804	48.5	+ 2 25	9.1	9.6	F8	4	..	46195b
33	285	48.2	+69 9	8.4	8.4	Ao	3	..	38112i	83	1054	48.5	- 1 56	8.9	9.7	G5	2	..	38183i
34	898	48.2	+52 42	5.75	5.81	A2	..	2,8	56,78	84	1884	48.5	-26 10	8.9	9.7	G5	2	..	20533b
35	1126	48.2	+43 57	8.9	9.0	A5	1	..	38088i	85	1810	48.5	-28 32	10.6	10.0	Ao	2	..	20533b
36	1085	48.2	+40 36	8.4	9.8	Ma	1	..	38088i	86	430	48.5	-58 41	8.3	9.6	K2	2	..	42691b
37	761	48.2	+23 51	7.9	8.2	F2	7	..	38153i	87	384	48.5	-58 58	8.2	8.9	Ko	5	..	42691b
38	699	48.2	+15 46	7.8	8.3	F8	3	..	37544i	88	717	48.6	+62 39	9.0	10.2	K5	2	..	38907i
39	800	48.2	+ 2 20	5.67	7.02	Ma	8	..	38063i	89	945	48.6	+55 40	6.93	8.11	K5	4	5,3	38136i
40	843	48.2	+ 1 22	8.8	8.9	A2	3	..	15135b	90	1015	48.6	- 9 35	10.0	10.4	F5	2	..	24605b
41	998	48.2	-21 5	9.1	9.9	F5	2	..	17402b	91	991	48.6	-11 27	10.5	11.6	K2	2	..	24605b
42	1921	48.2	-34 24	6.61	7.4	F5	10	..	20526b	92	978	48.6	-17 8	8.6	9.6	Ko	3	..	12628b
43	1916	48.2	-35 59	8.0	8.9	Ko	5	..	20526b	93	2094	48.6	-25 56	7.62	8.5	F5	8	..	20533b
44	1618	48.2	-40 34	9.7	9.4	Fo	3	0,3	20526b	94	549	48.7	+63 38	9.2	9.5	F2	2	..	38907i
45	1736	48.2	-44 27	8.3	9.2	Ko	3	..	42090b	95	1052	48.7	+44 53	7.89	7.87	B9	5	..	38088i
46	371	48.2	-64 33	8.8	9.6	G5	3	..	20430b	96	772	48.7	+22 49	9.8	9.9	A2	1	..	38153i
47	328	48.2	-66 38	9.4	9.9	F8	2	..	20430b	97	722	48.7	+21 12	8.8	9.8	Ko	2	..	38153i
48	159	48.3	+80 29	8.7	9.0	Fo	4	..	37558i	98	1016	48.7	- 9 3	9.3	10.4	K2	3	..	24605b
49	353	48.3	+68 58	8.0	9.0	Ko	2	..	38112i	99	2097	48.7	-25 31	8.5	9.7	K2	3	..	20533b
50	360	48.3	+67 16	8.4	8.9	F8	3	..	38112i	100	1918	48.7	-36 28	8.5	9.9	G5	3	..	20526b

THE HENRY DRAPER CATALOGUE.

31200

4^h 48^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1926	m. 48.7	° -36 58	9.5	11.3	K5	1	..	4602ob	51	305	m. 49.0	° -74 5	9.0	9.8	G5	2	..	2054ob
2	1586	48.7	-46 54	9.2	9.5	F2	5	..	3840ob	52	753	49.1	+25 8	8.61	8.61	Ao	3	..	38153i
3	760	48.7	-53 38	5.60	5.88	Fo	..	R	56,121	53	673	49.1	+12 12	7.14	7.64	F8	6	R	37544i
4		48.7	-53 37	6.44	6.72	Fo	..			54	672	49.1	+11 53	7.36	7.36	Ao	5	..	3892oi
5	1074	48.8	+47 17	8.6	8.6	Ao	4	R	38125i	55	671	49.1	+11 47	7.92	7.92	A	3	R	3892oi
6	1130	48.8	+43 49	8.9	8.9	Ao	2	..	38088i	56	749	49.1	-1 52	8.37	9.44	K2	3	..	38183i
7	1097	48.8	+43 0	8.1	8.5	F5	4	..	38088i	57	1038	49.1	-10 48	9.6	10.8	K5	4	..	24605b
8	754	48.8	+7 13	7.9	8.9	Ko	3	..	38075i	58	949	49.1	-17 59	8.5	8.8	Fo	3	..	12628b
9	847	48.8	+1 25	6.45	6.51	A2	8	E	38063i	59	1005	49.1	-21 49	8.7	9.8	Ko	3	..	17402b
10	1018	48.8	-9 49	9.36	9.64	Fo	4	..	24605b	60	1922	49.1	-36 9	9.1	10.6	Ko	2	..	20526b
11	1036	48.8	-10 41	9.6	9.7	A2	6	..	24605b	61	763	49.1	-53 34	9.1	10.0	G5	3	..	41013b
12	953	48.8	-20 26	9.1	9.6	A3	4	..	17402b	62	725	49.1	-54 8	8.9	9.7	Go	3	..	41013b
13	939	48.8	-22 3	9.1	9.9	F5	2	..	17402b	63	376	49.1	-63 19	9.4	9.5	A3	3	E	38371b
14	2658	48.8	-24 24	9.7	9.7	F5	2	..	17402b	64	288	49.2	+69 47	7.84	7.84	Ao	4	..	38112i
15	2051	48.8	-30 49	7.57	7.8	A2	9	..	20533b	65	1076	49.2	+47 11	8.6	8.6	B9	3	..	38125i
16	1533	48.8	-50 44	9.2	9.5	F5	4	..	3840ob	66	939	49.2	+46 20	9.0	9.6	G	2	R	38125i
17	285	48.9	+71 19	8.6	8.6	Ao	3	..	38112i	67	766	49.2	+23 31	9.4	9.4	A	3	R	38153i
18	333	48.9	+70 17	8.4	9.5	K2	1	..	38112i	68	667	49.2	+16 13	7.10	7.10	Ao	6	..	37544i
19	718	48.9	+62 53	8.4	8.9	F8	5	..	38097i	69	674	49.2	+11 47	7.98	7.98	Ao	3	..	3892oi
20	1131	48.9	+43 20	7.64	8.99	Ma	3	..	38088i	70	682	49.2	+9 59	8.92	8.92	A	1	..	38204i
21	723	48.9	+22 0	8.5	8.6	A3	6	..	38153i	71	971	49.2	-8 30	9.8	9.9	A3	4	..	24605b
22	672	48.9	+12 18	7.8	8.6	G5	2	..	3892oi	72	1039	49.2	-10 4	10.6	11.6	Ko	1	..	24605b
23	850	48.9	+1 10	8.37	8.79	F5	4	..	15135b	73	1628	49.2	-40 19	9.1	10.6	K5	2	..	4209ob
24	1018	48.9	-11 57	9.8	9.9	A3	5	..	24605b	74	1546	49.2	-47 1	7.2	8.3	G5	8	..	3840ob
25	1003	48.9	-20 56	6.93	6.9	A3	10	..	17402b	75	353	49.2	-67 0	9.9	11.3	Mb	1	..	2043ob
26	1608	48.9	-41 10	9.1	10.0	Ma	1	..	4209ob	76	155	49.2	-79 19	8.3	8.7	F5	4	..	15162b
27	1655	48.9	-42 55	8.5	9.7	K5	3	..	4209ob	77	354	49.3	+68 25	9.2	9.6	F5	2	..	38165i
28	1541	48.9	-47 16	9.5	9.8	F8	4	..	3840ob	78	829	49.3	+53 35	4.44	4.50	A2	..	..	56,78
29	1463	48.9	-49 34	7.4	8.3	Go	7	..	3840ob	79	726	49.3	+21 41	8.8	9.8	Ko	2	..	38153i
30	152	48.9	-78 11	8.0	8.0	Ao	5	..	46167b	80	846	49.3	+20 9	8.50	8.50	Ao	5	..	38153i
31	286	49.0	+69 56	8.49	9.05	Go	2	..	38112i	81	754	49.3	+18 17	9.1	9.7	Go	2	..	3892oi
32	1270	49.0	+49 37	8.9	8.9	Ao	3	..	38125i	82	782	49.3	+14 26	7.5	7.8	Fo	3	..	37544i
33	853	49.0	+32 38	7.33	8.33	Ko	4	..	37387i	83	675	49.3	+11 16	5.15	5.23	A3	..	I, R	56,78
34	828	49.0	+31 59	7.32	7.32	Ao	5	..	37387i	84	927	49.3	-3 52	9.1	9.7	G	2	..	14949b
35	809	49.0	+19 48	8.4	9.4	Ko	2	..	38153i	85	1019	49.3	-9 26	10.2	10.8	G	2	..	24605b
36	811	49.0	+19 20	6.24	6.52	Fo	8	..	37544i	86	1019	49.3	-12 47	9.6	10.4	G5	4	..	24605b
37	810	49.0	+2 17	3.87	3.70	B3	..	R	2476c	87	955	49.3	-20 27	9.3	9.8	G5	2	..	17402b
38	1011	49.0	-13 15	10.0	11.2	K5	2	..	24605b	88	1006	49.3	-21 42	8.7	9.8	K5	3	..	17402b
39	985	49.0	-14 24	9.6	10.0	F5	3	..	24605b	89	1929	49.3	-29 51	9.9	10.0	Ao	2	..	20533b
40	1979	49.0	-33 16	9.1	9.7	F5	3	..	4602ob	90	295	49.3	-76 28	8.7	9.3	Go	5	..	15162b
41	1589	49.0	-43 27	9.7	9.8	F8	2	..	20647b	91	355	49.4	+68 24	8.6	9.7	K2	2	..	38165i
42	1587	49.0	-46 57	10.1	10.7	Go	2	..	3840ob	92	1271	49.4	+49 46	6.89	7.17	Fo	5	2,9	2219b
43	1280	49.0	-51 24	9.7	10.7	G5	1	..	3840ob	93	741	49.4	+30 24	7.46	7.46	Ao	7	..	37387i
44		49.0	-51 53	6.62	7.3	F5	8	R	3840ob	94	764	49.4	+27 2	7.46	8.46	Ko	3	..	37387i
45		49.0	-51 53			A2				95	683	49.4	+10 0	4.74	4.74	Ao	..	R	56,78
46	591	49.0	-52 6	9.8	10.2	F5	3	..	3840ob	96	755	49.4	+7 38	5.54	6.54	Ko	9	..	38075i
47	723	49.0	-54 39	9.2	9.8	F5	1	..	3970ob	97	928	49.4	-3 23	6.61	7.03	F5	8	..	17409b
48	329	49.0	-66 43	9.1	10.1	Ko	2	..	2043ob	98	1019	49.4	-6 45	8.5	8.5	B9	6	..	12685b
49	352	49.0	-67 53	7.6	7.7	A2	8	..	2043ob	99	1020	49.4	-9 1	9.6	10.8	K5	2	..	24605b
50	324	49.0	-72 37	9.0	9.5	F8	2	..	2054ob	100	1021	49.4	-9 29	9.6	10.8	K5	1	..	24605b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

31300

4^h 49^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1020	m. 49.4	° -12 37	8.1	9.5	Mb	7	..	24605b	51	..	m. 49.9	° -69 21	Neb.	Neb.	Pc	..	R	76,21
2	2235	49.4	-23 38	9.7	10.0	G5	1	..	17402b	52	307	49.9	-74 48	8.6	9.6	Ko	3	..	15162b
3	2104	49.4	-25 18	9.4	9.4	F2	4	..	20533b	53	770	50.0	+23 51	9.4	9.4	B9	5	..	38153i
4	289	49.5	+69 16	9.5	9.5	A	1	..	38112i	54	765	50.0	+5 28	8.2	8.7	F8	2	..	38075i
5	742	49.5	+30 12	7.56	7.56	Ao	5	..	37387i	55	813	50.0	+2 49	8.2	8.5	F2	3	..	38075i
6	799	49.5	+8 27	6.77	6.77	Ao	7	..	38075i	56	799	50.0	-0 42	7.8	7.9	A5	4	..	38183i
7	778	49.5	+4 36	8.2	8.7	F8	3	..	38075i	57	1022	50.0	-12 39	10.6	11.2	Go	2	..	24605b
8	1079	49.5	-5 35	7.9	8.9	Ko	4	..	17409b	58	1955	50.0	-27 5	9.4	9.4	A2	4	..	20533b
9	988	49.5	-14 37	8.7	8.8	A5	7	..	24605b	59	1954	50.0	-27 13	8.9	8.9	F5	6	..	20533b
10	1890	49.5	-26 14	7.9	9.7	K2	3	..	20533b	60	2087	50.0	-31 54	8.9	9.7	Go	3	..	46020b
11	1590	49.5	-43 13	7.1	9.5	Ma	4	..	42090b	61	1986	50.0	-35 53	9.5	9.8	Fo	2	..	20526b
12	229	49.6	+74 7	6.23	7.23	Ko	..	0,7-	56,78	62	709	50.1	+24 27	6.28	6.56	Fo	9	..	38153i
13	290	49.6	+69 16	8.6	8.6	Ao	3	..	38112i	63	776	50.1	+22 27	7.44	8.44	Ko	7	..	38153i
14	1109	49.6	+40 1	8.22	8.17	B8	6	0,3	37365i	64	897	50.1	+0 47	8.8	9.3	F8	1	..	38183i
15	668	49.6	+16 29	7.14	7.14	Ao	6	..	37544i	65	1063	50.1	-2 45	9.1	9.2	A5	3	..	14949b
16	701	49.6	+15 18	10.1	10.2	A3	1	..	38020i	66	1044	50.1	-9 58	10.2	11.3	K2	2	..	24605b
17	1061	49.6	-1 57	8.5	9.5	Ko	2	..	38183i	67	1043	50.1	-10 46	9.1	9.5	F5	8	..	24605b
18	994	49.6	-11 30	10.5	11.7	K5	2	..	24605b	68	997	50.1	-10 59	10.5	11.3	G5	2	..	24605b
19	989	49.6	-14 16	9.6	10.6	Ko	2	..	24605b	69	1956	50.1	-27 42	9.2	9.8	F5	3	..	20533b
20	990	49.6	-14 30	8.7	9.7	Ko	5	..	24605b	70	1762	50.1	-44 43	8.5	9.8	K5	3	..	42090b
21	893	49.6	-15 6	8.5	8.5	Ao	7	..	24605b	71	1596	50.1	-46 47	8.9	9.5	G5	3	..	38400b
22	984	49.6	-17 9	8.9	9.0	A2	3	..	12628b	72	387	50.1	-59 10	8.5	9.3	Go	3	..	42691b
23	133	49.7	+82 25	9.2	9.5	F2	2	..	37558i	73	787	50.2	+14 54	5.74	5.69	B8	..	1,9	56,78
24	790	49.7	+58 28	7.78	8.56	G5	2	..	14302i	74	737	50.2	+13 31	8.4	8.4	B9	3	..	37544i
25	847	49.7	+57 9	9.2	9.3	A2	1	..	38970i	75	973	50.2	-4 1	9.3	9.9	G	1	..	14949b
26	1077	49.7	+47 44	7.7	7.7	Ao	6	1,4	38125i	76	998	50.2	-11 32	9.3	10.3	Ko	2	..	24605b
27	930	49.7	+36 1	6.18	5.99	B2	8	3,6 R	37365i	77	2037	50.2	-32 10	9.1	9.7	F8	3	..	46020b
28	708	49.7	+27 40	8.7	9.2	F8	2	..	37387i	78	188	50.2	-77 12	8.3	8.7	F5	6	..	15162b
29	727	49.7	+22 3	9.0	9.1	A2	3	..	38153i	79	1078	50.3	+47 52	8.6	8.7	A2	2	..	38125i
30	785	49.7	+15 3	9.29	9.85	Go	1	..	38920i	80	1114	50.3	+39 6	8.6	8.6	Ao	2	..	38088i
31	893	49.7	+0 19	5.86	5.74	B5	8	2,8	38183i	81	926	50.3	+33 50	8.0	8.8	G5	4	0,4	37387i
32	1952	49.7	-27 52	8.2	8.6	Ko	6	..	20533b	82	731	50.3	+21 26	7.27	7.55	Fo	8	..	38153i
33	1549	49.7	-47 43	9.2	9.8	Go	2	..	38400b	83	802	50.3	-0 31	8.4	8.4	B9	6	..	14949b
34	697	49.7	-55 47	8.9	9.8	K2	2	..	42691b	84	992	50.3	-14 17	9.6	10.6	Ko	2	..	24605b
35	318	49.7	-70 25	8.2	9.2	Ko	4	..	20540b	85	2247	50.3	-23 39	8.2	9.4	K2	3	..	17402b
36	286	49.7	-71 11	9.7	10.1	F5	2	..	20540b	86	1289	50.3	-50 57	9.2	10.7	Ko	2	..	38400b
37	551	49.8	+63 13	8.5	9.0	F8	4	0,3	38907i	87	1015	50.4	+41 55	9.4	9.5	A2	2	..	38088i
38	815	49.8	+19 51	8.0	9.0	Ko	4	..	38153i	88	854	50.4	+1 37	8.5	9.6	K2	1	..	38183i
39	1040	49.8	-10 53	9.6	10.1	F8	6	..	24605b	89	898	50.4	+1 4	8.89	9.67	G5	1	..	38183i
40	2244	49.8	-23 39	9.4	9.1	F8	3	..	17402b	90	1000	50.4	-11 54	8.6	9.6	Ko	8	..	24605b
41	1891	49.8	-26 35	8.2	10.0	Ko	3	..	20533b	91	961	50.4	-20 33	8.6	8.8	F2	6	..	17402b
42	1112	49.9	+39 8	8.6	8.6	Ao	2	..	38088i	92	1989	50.4	-35 35	7.69	8.6	G5	7	..	20526b
43	1042	49.9	-9 57	8.91	8.91	Ao	9	..	24605b	93	1599	50.4	-46 4	10.1	10.6	Go	2	..	38400b
44	1041	49.9	-10 43	10.2	10.5	F2	3	..	24605b	94	599	50.4	-52 23	9.1	10.1	K2	2	..	38400b
45	995	49.9	-11 46	9.2	9.3	A5	6	..	24605b	95	727	50.4	-54 29	8.6	9.4	F8	4	..	39700b
46	1021	49.9	-12 4	9.3	10.4	K2	3	..	24605b	96	94	50.4	-83 41	7.32	9.0	G5	7	..	20557b
47	988	49.9	-16 13	9.3	10.4	K2	2	..	24605b	97	929	50.5	+34 4	9.0	9.6	Go	2	..	38934i
48	1935	49.9	-29 8	9.2	9.7	F2	3	..	20533b	98	855	50.5	+33 0	2.90	3.97	K2	..	R	6145c
49	1781	49.9	-38 19	6.99	8.5	Ko	8	..	42101b	99	738	50.5	+13 50	8.9	9.5	Go	2	..	38920i
50	1548	49.9	-48 47	9.7	10.9	G5	2	..	38400b	100	680	50.5	+11 5	8.6	8.7	A2	3	..	38204i

THE HENRY DRAPER CATALOGUE.

31400

4^h 50^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	756	50.5	+ 7 14	8.91	9.33	F5	1	..	38204i	51	1117	50.9	+39 29	8.0	8.8	G5	2	..	38088i
2	1086	50.5	- 5 17	9.3	9.3	Ao	3	..	14949b	52	816	50.9	+ 2 47	8.8	9.6	G5	4	5,2	46195b
3	1023	50.5	- 9 42	9.6	10.6	Ko	2	..	24605b	53	859	50.9	+ 1 53	7.8	7.9	A3	3	E	38075i
4	1045	50.5	- 9 56	11.1	11.5	F5	2	..	24605b	54	858	50.9	+ 1 8	8.99	9.41	F5	2	..	38183i
5	1014	50.5	-13 4	9.8	10.6	G5	2	..	24605b	55	806	50.9	- 0 27	8.8	8.9	A2	2	..	38183i
6	1896	50.5	-26 53	8.0	9.7	Ko	4	..	20533b	56	1002	50.9	-11 2	8.9	8.9	Ao	9	..	24605b
7	702	50.5	-55 51	7.5	8.1	B8	7	R	42691b	57	1003	50.9	-11 32	8.9	9.0	A5	9	..	24605b
8	285	50.5	-75 15	8.5	9.6	K2	3	..	15162b	58	993	50.9	-16 2	8.9	9.3	F5	3	..	12628b
9	772	50.6	+23 11	8.0	8.4	F5	7	..	38153i	59	1946	50.9	-29 43	8.9	10.0	K2	3	..	20533b
10	688	50.6	+10 3	8.67	9.17	F8	1	..	38204i	60	2095	50.9	-31 36	7.87	8.6	G5	7	E	20533b
11	769	50.6	+ 5 15	6.59	6.59	Ao	9	..	38075i	61	1671	50.9	-42 33	9.1	9.7	Go	3	..	42090b
12	782	50.6	+ 4 31	7.8	8.3	F8	5	..	38075i	62	436	50.9	-58 0	8.1	9.5	Ko	3	..	42691b
13	901	50.6	+ 1 0	8.54	9.54	Ko	2	..	38183i	63	1188	51.0	+48 12	8.6	8.6	B8	3	..	38125i
14	991	50.6	-16 55	5.80	6.80	Ko	6	..	20232b	64	711	51.0	+24 37	8.8	9.6	G5	3	..	38153i
15	1013	50.6	-21 20	9.2	9.5	Ao	4	..	17402b	65	784	51.0	+ 4 43	8.6	8.7	A2	3	..	38075i
16	1014	50.6	-21 21	9.6	9.7	A3	3	..	17402b	66	818	51.0	+ 3 2	8.0	8.0	B9	7	..	38075i
17	2253	50.6	-23 41	9.9	9.4	Fo	2	..	17402b	67	758	51.0	- 1 49	9.22	10.22	Ko	1	..	14949b
18	247	50.7	+72 19	9.0	9.3	F	2	..	37630i	68	978	51.0	- 4 4	8.1	9.2	K2	3	..	14949b
19	989	50.7	+56 27	8.6	8.7	A2	2	R	38970i	69	978	51.0	- 8 3	8.3	8.3	Ao	10	..	24605b
20	814	50.7	+17 52	9.5	10.1	Go	3	..	38920i	70	1024	51.0	-12 18	10.9	11.5	Go	1	..	24605b
21	740	50.7	+13 21	4.28	5.28	Ko	..	5,R	56,78	71	2256	51.0	-23 33	8.9	9.7	K2	2	..	17402b
22	803	50.7	+ 8 59	9.1	9.2	A2	2	..	38204i	72	1792	51.0	-38 52	9.4	10.6	K2	2	..	42101b
23	759	50.7	+ 7 45	6.52	6.94	F5	8	..	38075i	73	287	51.1	+71 10	8.5	9.1	Go	3	..	38112i
24	1024	50.7	- 6 15	8.1	9.1	Ko	5	0,4	14949b	74	554	51.1	+63 12	9.7	10.2	F8	1	..	38907i
25	1025	50.7	- 6 36	8.8	9.2	F5	2	..	14664b	75	936	51.1	+35 36	9.1	9.9	G5	1	..	38934i
26	1047	50.7	-10 13	8.9	9.0	A2	8	..	24605b	76	671	51.1	+16 35	7.48	8.48	Ko	3	..	37544i
27	1046	50.7	-10 34	9.6	9.6	Ao	7	..	24605b	77	861	51.1	+ 1 13	8.69	9.11	F5	3	..	38183i
28	994	50.7	-14 53	8.74	9.52	G5	5	..	24605b	78	1088	51.1	- 5 29	8.3	8.3	B9	5	..	17409b
29	2110	50.7	-25 48	8.0	9.2	Ko	4	..	20533b	79	1025	51.1	-12 11	10.5	11.5	Ko	2	..	24605b
30	1790	50.7	-38 20	6.76	8.2	Ko	9	..	42101b	80	1026	51.1	-12 48	10.2	10.6	F5	2	..	24605b
31	93	50.7	-83 4	9.9	10.2	F	2	..	20557b	81	1018	51.1	-13 12	8.8	9.1	Fo	8	..	24605b
32	67	50.8	+86 44	8.8	9.4	G	2	..	37546i	82	990	51.1	-17 55	8.7	9.2	F8	3	..	45972b
33	248	50.8	+72 16	8.5	9.3	G5	2	..	37630i	83	1672	51.1	-42 17	9.3	10.3	Ko	1	..	20647b
34	1116	50.8	+39 20	8.5	8.9	F5	4	..	37365i	84	712	51.1	-57 22	8.5	10.0	Ko	1	..	42691b
35	721	50.8	+28 7	9.0	9.8	G5	1	..	38161i	85	350	51.1	-60 48	8.1	9.2	Ko	3	..	42691b
36	782	50.8	+ 7 0	8.6	9.4	G5	1	..	38075i	86	446	51.2	+65 14	8.75	8.75	Ao	4	..	38907i
37	857	50.8	+ 1 28	6.93	7.07	A5	5	E	38075i	87	1005	51.2	+51 47	8.0	9.0	Ko	3	..	38125i
38	902	50.8	+ 0 37	9.1	9.6	F8	2	..	14949b	88	1065	51.2	+44 18	8.8	8.9	A3	2	..	38088i
39	1069	50.8	- 2 29	8.5	9.3	G5	3	5,2	14949b	89	811	51.2	+ 8 41	7.4	7.5	A2	4	..	38075i
40	1048	50.8	-10 46	11.1	11.4	Fo	2	..	24605b	90	714	51.2	+ 3 49	8.8	8.9	A2	2	..	38075i
41	1001	50.8	-11 52	9.3	9.7	F5	8	..	24605b	91	1025	51.2	- 9 15	10.0	10.5	F8	2	..	24605b
42	1015	50.8	-13 18	9.3	9.8	F8	5	..	24605b	92	1027	51.2	-12 23	10.5	11.5	Ko	2	..	24605b
43	897	50.8	-15 31	9.2	10.4	K5	3	..	24605b	93	1028	51.2	-12 33	10.0	11.2	K5	2	..	24605b
44	992	50.8	-16 35	5.82	6.82	Ko	6	R	20232b	94	1020	51.2	-13 9	10.2	10.8	Go	2	..	24605b
45	1943	50.8	-29 2	7.7	9.1	Ko	7	..	20533b	95	1689	51.2	-39 16	7.72	8.6	G5	4	..	42101b
46	1945	50.8	-29 10	9.7	10.0	G5	3	..	20533b	96	1676	51.2	-42 40	9.5	9.8	G	2	..	20647b
47	1944	50.8	-29 12	10.4	10.6	G	2	..	20533b	97	351	51.2	-60 55	9.1	9.3	F	2	R	42691b
48	1791	50.8	-38 51	9.9	9.7	F	3	E	42101b	98	375	51.2	-61 43	9.2	9.3	F5	3	..	42691b
49	1596	50.8	-43 10	9.1	9.8	Ko	3	0,2	20647b	99	357	51.3	+69 2	7.07	7.49	F5	6	0,5	36654i
50	1557	50.8	-47 11	9.7	10.6	Ko	2	..	38400b	100	1122	51.3	+39 55	7.32	7.74	F5	6	3,4	37365i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

31500

4^h 51^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	927	51.3	+34 7	8.0	8.8	G5	4	..	38934i	51	930	51.7	+34 59	8.52	8.58	A2	4	2,4	38934i
2	815	51.3	+17 20	9.1	9.1	Ao	1	..	38920i	52	771	51.7	+29 59	7.86	7.86	Ao	5	..	37387i
3	1070	51.3	- 2 1	8.7	8.7	Ao	4	..	38183i	53	777	51.7	+23 48	5.99	6.99	Ko	9	..	38153i
4	1050	51.3	-10 19	9.2	10.6	Mb	4	..	24605b	54	676	51.7	+10 39	8.3	8.3	Ao	4	..	38204i
5	996	51.3	-14 11	9.3	9.9	Go	5	..	24605b	55	819	51.7	+ 2 37	8.4	9.4	Ko	2	..	38075i
6	2072	51.3	-30 27	7.33	7.4	Ao	9	..	46020b	56	1008	51.7	-11 12	8.7	9.0	Fo	9	..	24605b
7	603	51.3	-52 30	7.5	8.2	B9	8	..	38400b	57	1029	51.7	-11 57	9.6	10.2	Go	5	..	24605b
8	286	51.3	-75 58	9.6	9.6	Ao	3	..	15162b	58	1030	51.7	-12 33	10.9	10.9	A	1	..	24605b
9	179	51.4	+77 51	8.4	8.8	F5	3	..	37558i	59	1024	51.7	-13 18	9.6	10.7	K2	4	..	24605b
10	905	51.4	+52 19	8.0	9.0	Ko	4	..	38125i	60	1839	51.7	-28 44	7.6	8.9	K5	6	..	20533b
11	853	51.4	+20 21	10.0	10.8	G5	1	..	38153i	61	2000	51.7	-35 1	8.52	9.4	Ko	5	..	20526b
12	1091	51.4	- 5 20	5.46	5.44	B9	9	R	17409b	62	281	51.7	-68 37	9.1	10.1	Ko	3	..	20430b
13	1006	51.4	-11 4	10.5	10.6	A5	3	..	24605b	63	264	51.8	+73 37	6.76	7.76	Ko	5	0,4	37343i
14	1022	51.4	-13 8	10.5	11.3	G5	1	..	24605b	64	1022	51.8	+41 17	8.9	8.9	B9	2	..	38088i
15	1021	51.4	-13 48	10.0	10.1	A3	5	..	24605b	65	746	51.8	+30 29	8.1	8.2	A3	3	..	37387i
16	903	51.4	-15 2	7.72	7.80	A3	2	..	20232b	66	816	51.8	+17 15	9.1	9.6	F8	1	..	38920i
17	2115	51.4	-25 54	6.62	7.2	A2	10	..	20533b	67	716	51.8	+ 3 8	8.2	8.2	Ao	6	..	38075i
18	321	51.4	-70 0	7.76	9.3	Ma	6	5,7	20540b	68	865	51.8	+ 1 58	8.6	9.0	F5	2	..	38183i
19	1114	51.5	+40 38	8.6	8.6	A	2	..	38088i	69	1095	51.8	- 4 57	7.80	7.78	B9	5	..	17409b
20	712	51.5	+27 14	8.7	9.1	F5	2	..	38161i	70	980	51.8	- 8 0	10.0	11.2	K5	1	..	24605b
21	675	51.5	+10 47	8.5	9.3	G5	1	..	38204i	71	994	51.8	-17 53	7.48	8.26	G5	6	..	12628b
22	773	51.5	+ 5 54	8.8	8.9	A3	2	..	38075i	72	1968	51.8	-27 52	8.1	9.8	K2	3	..	20533b
23	1051	51.5	- 9 56	10.0	11.0	Ko	2	..	24605b	73	1628	51.8	-41 14	8.1	9.4	K5	4	..	42090b
24	1023	51.5	-13 46	10.0	11.0	Ko	3	..	24605b	74	713	51.8	-57 30	7.8	8.5	F2	6	..	42691b
25	..	51.5	-14 2	..	..	F5	1	..	24605b	75	376	51.8	-61 33	8.2	9.3	Ko	3	..	42691b
26	991	51.5	-17 30	9.1	9.4	Fo	2	..	45972b	76	282	51.8	-68 16	8.9	10.1	K5	2	..	20430b
27	2267	51.5	-23 24	7.6	8.1	Go	8	..	17402b	77	187	51.9	+76 42	8.0	8.4	F5	4	3,3	37558i
28	2101	51.5	-30 58	8.5	10.1	K5	1	..	46020b	78	836	51.9	+53 18	8.0	8.4	F5	2	..	14302i
29	1691	51.5	-39 48	6.01	8.1	Ko	..	0,7	56,121	79	906	51.9	+52 59	6.40	7.47	K2	4	..	14302i
30	1565	51.5	-47 30	10.1	10.8	A5	2	..	38400b	80	1117	51.9	+40 53	8.8	8.8	B9	3	..	38088i
31	375	51.5	-64 7	9.7	10.7	Ko	1	..	38371b	81	773	51.9	+29 41	8.4	8.5	A2	3	..	37387i
32	280	51.5	-68 15	6.78	7.7	Go	8	..	20430b	82	747	51.9	+13 30	9.3	9.3	Ao	3	0,2	4420m
33	1143	51.6	+44 0	8.5	8.8	Fo	3	..	38088i	83	792	51.9	+ 4 38	8.8	9.8	Ko	1	..	38183i
34	1113	51.6	+42 30	8.4	9.4	Ko	1	..	38088i	84	1052	51.9	-10 14	10.7	11.2	F8	2	..	24605b
35	1020	51.6	+41 12	9.2	9.2	A	1	..	38088i	85	904	51.9	-15 32	7.58	7.72	A5	3	..	20232b
36	985	51.6	+38 35	8.4	8.5	A2	4	..	37365i	86	2004	51.9	-35 47	8.8	8.5	Fo	4	..	20526b
37	770	51.6	+29 25	9.0	9.1	A2	2	..	37387i	87	1609	51.9	-46 32	9.2	10.0	Fo	4	..	38400b
38	819	51.6	+19 11	9.1	9.9	G5	1	..	38213i	88	378	51.9	-61 0	9.2	9.5	F8	2	..	42691b
39	672	51.6	+17 0	5.68	6.68	Ko	8	0,10	37544i	89	378	51.9	-63 22	9.2	9.6	F5	3	..	38371b
40	691	51.6	+ 9 37	9.1	9.7	G	1	..	38204i	90	265	52.0	+73 55	6.00	6.06	A2	..	2,9	56,78
41	863	51.6	+ 1 41	8.8	8.8	Ao	2	..	38183i	91	1119	52.0	+42 24	8.6	8.6	A	2	..	38088i
42	864	51.6	+ 1 22	8.4	9.8	Ma	2	..	38183i	92	717	52.0	+24 54	5.65	5.63	B9	10	R	38153i
43	936	51.6	- 7 10	8.1	8.9	G5	1	..	17409b	93	748	52.0	+13 47	9.1	9.9	G5	2	..	4420m
44	1027	51.6	- 9 30	10.9	11.3	F5	1	..	24605b	94	807	52.0	+ 0 3	8.28	9.28	Ko	4	..	38183i
45	1007	51.6	-11 44	10.5	10.8	F	2	..	24605b	95	1053	52.0	-10 1	9.81	10.59	G5	4	..	24605b
46	1626	51.6	-41 52	8.6	10.1	K5	2	..	42090b	96	1011	52.0	-11 5	8.7	9.1	F5	8	..	24605b
47	326	51.6	-72 38	9.1	9.5	F5	3	..	20540b	97	1010	52.0	-11 31	10.5	10.8	Fo	3	..	24605b
48	288	51.7	+72 2	8.2	8.2	Ao	3	..	37630i	98	964	52.0	-20 13	9.3	9.8	G5	2	..	12628b
49	849	51.7	+57 46	8.5	8.5	Ao	2	..	38970i	99	1019	52.0	-21 23	var.	var.	A	..	R	M
50	1002	51.7	+37 11	6.72	6.86	A5	..	0,6-	56,78	100	2271	52.0	-23 12	9.2	9.1	G5	3	..	17402b

THE HENRY DRAPER CATALOGUE.

31600

4^h 52^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2691	52.0	-24 19	8.7	9.1	Go	4	..	17402b	51	1034	52.5	-6 34	8.8	9.8	Ko	2	..	14664b
2	2076	52.0	-30 29	8.5	10.0	K5	2	..	20533b	52	1034	52.5	-9 17	10.2	11.0	G5	2	..	24605b
3	1697	52.0	-39 56	7.45	9.7	G5	2	..	42101b	53	1033	52.5	-9 26	9.3	9.6	Fo	6	..	24605b
4	1699	52.0	-39 56	9.1	9.1	Ko	4	..	42101b	54	1032	52.5	-9 34	8.5	9.5	Ko	7	..	24605b
5	1630	52.0	-40 59	8.2	9.7	K5	3	..	42090b	55	1012	52.5	-11 9	8.8	9.9	K2	7	..	24605b
6	..	52.0	-67 6	Neb.	Neb.	Pd	..	R	76,21	56	1029	52.5	-13 47	9.3	9.6	Fo	6	..	24605b
7	335	52.1	+70 41	8.9	8.9	Ao	2	..	38112i	57	1000	52.5	-14 6	10.2	10.5	F2	3	..	24605b
8	932	52.1	+34 15	8.0	8.3	Fo	5	..	37387i	58	2111	52.5	-31 46	8.5	9.4	Ao	5	..	46020b
9	749	52.1	+13 52	8.5	9.3	G5	3	0,2-	4420m	59	1633	52.5	-41 15	9.7	9.7	G	1	..	42090b
10	1054	52.1	-10 34	9.8	10.8	Ko	2	..	24605b	60	1557	52.5	-50 7	8.64	9.6	Ko	3	..	38400b
11	2273	52.1	-23 48	8.7	9.1	G5	3	..	17402b	61	329	52.5	-72 36	9.0	9.5	F8	3	..	20540b
12	1701	52.1	-39 16	10.5	9.8	Go	2	..	42101b	62	853	52.6	+60 56	6.12	6.54	F5	8	..	38136i
13	1298	52.1	-51 16	8.5	9.8	F8	5	..	38400b	63	1082	52.6	+47 16	9.2	10.2	Ko	1	..	38125i
14	746	52.2	+62 2	9.2	9.2	Ao	3	..	38907i	64	1023	52.6	+41 44	6.68	7.68	Ko	5	5,2	38088i
15	1081	52.2	+47 50	9.5	10.3	G5	2	..	38125i	65	752	52.6	+13 48	8.2	8.8	Go	6	5,2	4420m
16	1146	52.2	+43 29	8.5	8.5	B9	3	..	38088i	66	959	52.6	-18 16	8.53	9.53	Ko	3	..	12628b
17	1147	52.2	+43 11	7.34	7.15	B2	7	..	38088i	67	960	52.6	-18 34	8.5	8.8	Fo	2	..	12628b
18	858	52.2	+32 16	8.5	9.0	F8	2	..	38934i	68	1023	52.6	-21 30	9.6	10.0	A5	2	..	17402b
19	762	52.2	+25 57	8.5	9.3	G5	3	..	38153i	69	2700	52.6	-24 16	8.5	10.0	K5	2	..	17402b
20	855	52.2	+20 8	8.35	9.35	Ko	1	..	38153i	70	2081	52.6	-30 24	9.2	9.2	F5	5	..	20533b
21	763	52.2	+18 55	9.3	10.1	G5	2	..	38213i	71	770	52.6	-53 5	8.5	9.2	F5	4	..	39700b
22	905	52.2	+0 51	8.4	9.2	G5	2	..	38183i	72	356	52.6	-67 19	9.4	9.8	F5	4	..	20430b
23	762	52.2	-1 14	6.23	6.57	F2	8	..	17409b	73	..	52.6	-69 33	Neb.	Neb.	Pc	..	R	76,21
24	1032	52.2	-6 41	8.1	8.1	Ao	7	1,3	14949b	74	293	52.7	+69 56	8.84	9.62	G5	3	5,2	38165i
25	984	52.2	-8 36	6.82	6.96	A5	4	..	2298b	75	370	52.7	+66 41	6.29	6.79	F8	7	..	36654i
26	1026	52.2	-13 51	9.1	9.2	A3	7	..	24605b	76	449	52.7	+65 26	8.4	9.5	K2	3	..	38907i
27	2274	52.2	-23 27	8.5	8.5	F5	7	..	17402b	77	845	52.7	+54 26	8.8	9.2	F5	3	..	38970i
28	125	52.2	-81 41	8.2	9.2	Ko	4	0,3	20538b	78	1149	52.7	+43 11	8.7	8.7	Ao	3	..	38088i
29	719	52.3	+62 53	9.2	9.2	Ao	3	..	38136i	79	719	52.7	+24 21	8.0	7.9	B5	3	..	38213i
30	985	52.3	-8 52	9.3	9.7	F5	4	..	24605b	80	753	52.7	+14 3	9.8	9.9	A3	3	..	4420m
31	1030	52.3	-8 59	10.0	10.3	F2	3	..	24605b	81	763	52.7	-1 40	8.8	8.8	Ao	2	..	14949b
32	1031	52.3	-9 6	10.0	10.4	F5	3	..	24605b	82	1102	52.7	-5 54	9.3	9.6	Fo	5	..	14949b
33	1032	52.3	-12 3	9.3	10.5	K5	3	..	24605b	83	1013	52.7	-11 18	8.6	9.6	Ko	8	..	24605b
34	1031	52.3	-12 41	8.3	9.4	K2	8	..	24605b	84	1034	52.7	-12 53	9.3	9.8	F8	4	..	24605b
35	1027	52.3	-12 58	9.2	10.0	G5	6	..	24605b	85	959	52.7	-22 12	8.3	9.5	K2	3	..	17402b
36	999	52.3	-16 17	7.7	7.7	Ao	4	..	20232b	86	2112	52.7	-31 52	8.9	10.0	Ko	3	5,2	46020b
37	966	52.3	-20 37	9.1	9.8	Ko	2	..	17402b	87	2048	52.7	-32 44	9.4	9.7	F8	2	..	46020b
38	2123	52.3	-25 48	9.7	10.0	Ko	1	..	20533b	88	1708	52.7	-39 6	7.86	9.2	K2	4	..	42101b
39	1958	52.3	-29 38	9.4	10.1	K2	2	..	20533b	89	1634	52.7	-41 36	9.1	9.7	A5	3	..	42090b
40	605	52.3	-52 41	7.5	7.8	A3	7	..	38400b	90	993	52.8	+56 8	7.8	8.6	G5	3	..	38970i
41	814	52.4	+8 35	8.6	8.7	A5	3	..	38075i	91	1151	52.8	+43 51	7.8	8.8	Ko	3	..	38088i
42	867	52.4	+1 25	9.1	9.1	Ao	1	..	38183i	92	782	52.8	+23 43	8.5	8.5	Ao	3	..	38153i
43	1053	52.4	-19 22	9.3	9.7	Go	1	..	45922b	93	987	52.8	-4 49	7.55	8.33	G5	2	..	17409b
44	379	52.4	-61 2	9.1	10.1	K	1	..	42691b	94	1001	52.8	-14 16	10.0	11.0	Ko	2	..	24605b
45	379	52.4	-63 47	8.5	9.5	Ko	5	0,3	38371b	95	961	52.8	-18 43	8.9	10.0	K2	1	..	45972b
46	796	52.5	+58 31	7.39	8.17	G5	4	..	14302i	96	557	52.9	+63 38	9.0	10.4	Ma	..	..	M
47	1005	52.5	+37 44	4.99	4.99	Ao	..	0,R	56,78	97	820	52.9	+17 51	8.94	9.44	F8	2	E	38920i
48	774	52.5	+29 41	7.46	7.52	A2	5	..	37387i	98	869	52.9	+1 31	8.2	8.6	F5	2	E	38075i
49	707	52.5	+15 39	8.6	8.7	A5	7	5,2	4420m	99	1030	52.9	-13 36	9.1	9.9	G5	6	..	24605b
50	824	52.5	+2 43	9.8	9.9	A2	3	..	46195b	100	1001	52.9	-16 22	9.2	9.2	Ao	4	..	12628b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

31700

4^h 52^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1928	m. 52.9	° -26 50	9.9	9.7	Ao	3	..	20533b	51	963	m. 53.3	° -18 8	10.2	10.2	Ao	1	..	45972b
2	355	52.9	-60 7	9.09	9.5	G5	2	..	42691b	52	2129	53.3	-25 8	9.58	9.4	Fo	4	..	17402b
3	382	52.9	-61 53	8.5	9.5	K2	4	..	38371b	53	609	53.3	-52 9	7.5	9.8	K2	4	..	38400b
4	324	52.9	-70 14	9.5	9.6	A5	3	..	20540b	54	338	53.3	-66 51	6.27	8.6	K5	8	..	20430b
5	1074	53.0	+44 42	7.92	8.20	Fo	4	0,3-	38088i	55	131	53.3	-80 49	7.91	7.9	F2	6	..	20557b
6	752	53.0	+30 55	8.0	8.5	F8	5	..	37387i	56	799	53.4	+58 30	8.9	9.0	A2	2	..	38970i
7	751	53.0	+30 51	8.6	9.2	G	2	..	37387i	57	994	53.4	+56 59	8.0	8.8	G5	3	..	14302i
8	709	53.0	+15 29	9.1	9.1	B9	5	..	4420m	58	1155	53.4	+43 26	9.2	9.2	A	2	R	38088i
9	730	53.0	+3 58	8.8	8.8	Ao	2	..	38183i	59	1027	53.4	+41 49	9.2	9.7	F8	2	..	38088i
10	906	53.0	+0 42	8.2	8.3	A5	4	..	38183i	60	1125	53.4	+40 11	8.02	8.30	Fo	6	..	37365i
11	1105	53.0	-5 32	9.2	9.5	F	3	R	14664b	61	1133	53.4	+39 15	6.00	6.42	F5	8	3,8	37365i
12	1038	53.0	-6 16	7.27	8.27	Ko	7	0,4	14949b	62	676	53.4	+16 47	10.5	10.6	A2	2	E	38920i
13	1056	53.0	-10 35	9.3	9.8	F8	7	..	24605b	63	711	53.4	+15 56	10.1	11.1	K	1	R	4420m
14	1014	53.0	-11 38	10.0	10.4	F5	3	..	24605b	64	796	53.4	+14 24	5.98	5.93	B8	..	0,8-	56,78
15	1002	53.0	-16 18	10.0	11.2	K5	2	..	24605b	65	688	53.4	+12 16	8.6	9.0	F5	2	..	37544i
16	1027	53.0	-20 57	10.0	9.8	F5	3	..	17402b	66	820	53.4	+8 50	8.2	8.2	Ao	3	..	38075i
17	2281	53.0	-23 12	8.7	8.8	F2	4	..	17402b	67	872	53.4	+1 33	4.73	5.73	Ko	..	0,9 R	56,78
18	1854	53.0	-28 9	9.5	10.0	Go	1	..	20533b	68	953	53.4	-3 54	6.98	7.40	F5	6	..	17409b
19	2016	53.0	-33 33	9.1	9.4	Go	3	..	46020b	69	1040	53.4	-9 51	9.06	9.48	F5	6	..	24605b
20	1617	53.0	-46 48	9.9	11.2	K2	2	..	38400b	70	1058	53.4	-10 25	9.3	9.3	Ao	8	..	24605b
21	731	53.0	-54 36	7.4	9.1	Ko	7	..	39700b	71	964	53.4	-18 38	9.3	9.6	F2	3	..	12628b
22	300	53.0	-69 34	8.8	8.9	A2	6	..	20540b	72	2054	53.4	-32 3	9.1	10.0	G5	2	..	46020b
23	871	53.1	+1 55	9.1	9.1	Ao	2	..	38183i	73	2022	53.4	-33 19	8.2	9.7	K2	3	..	46020b
24	811	53.1	-0 43	8.4	8.5	A3	2	..	38183i	74	2020	53.4	-33 28	8.1	9.2	G5	5	5,3	46020b
25	1106	53.1	-4 56	9.35	9.41	A2	3	..	14949b	75	2021	53.4	-33 51	10.3	10.0	Ko	2	..	46020b
26	1003	53.1	-14 24	5.87	5.70	B3	8	..	20232b	76	1964	53.4	-37 55	9.5	11.5	G5	1	..	42101b
27	1002	53.1	-14 36	9.1	9.9	G5	5	..	24605b	77	1621	53.4	-46 37	9.2	10.8	Ko	3	..	38400b
28	1003	53.1	-16 10	9.8	10.4	Go	2	..	24605b	78	1569	53.4	-48 11	9.9	10.4	A5	3	..	38400b
29	960	53.1	-22 39	8.7	8.8	A3	4	..	17402b	79	952	53.5	+55 25	7.41	7.49	A3	4	..	14302i
30	2116	53.1	-31 26	8.9	10.6	K5	1	..	46020b	80	1134	53.5	+39 31	6.73	7.91	K5	6	0,4	37365i
31	1803	53.1	-38 48	8.8	9.8	Go	2	..	42101b	81	771	53.5	+26 6	8.6	9.4	G5	3	E	38153i
32	357	53.1	-60 35	8.6	8.7	F2	5	..	42691b	82	766	53.5	+25 47	8.0	8.8	G5	5	..	38153i
33	1193	53.2	+48 39	8.6	9.2	Go	2	..	38125i	83	784	53.5	+23 36	8.6	8.7	A5	2	..	38153i
34	839	53.2	+31 27	8.0	8.5	F8	4	..	37387i	84	..	53.5	+15 34	..	..	Go	2	R	4420m
35	840	53.2	+31 9	8.4	8.9	F8	3	..	37387i	85	828	53.5	+2 42	9.1	9.6	F8	2	..	46195b
36	794	53.2	+6 50	9.5	10.9	Ma	..	..	M	86	988	53.5	-4 35	8.6	9.6	Ko	3	..	14949b
37	793	53.2	+6 15	8.8	8.8	Ao	2	..	38075i	87	1035	53.5	-12 54	8.8	9.4	Go	8	..	24605b
38	908	53.2	+0 18	7.28	8.06	G5	6	..	38183i	88	1006	53.5	-16 21	8.5	8.5	B9	2	..	20232b
39	1080	53.2	-2 22	6.43	6.43	Ao	9	..	17409b	89	1714	53.5	-39 37	8.8	9.7	K2	3	..	42101b
40	989	53.2	-8 13	9.1	9.4	F2	7	..	24605b	90	1615	53.5	-43 36	7.6	9.7	K5	4	..	42090b
41	1057	53.2	-10 37	10.6	11.6	Ko	1	..	24605b	91	1623	53.5	-46 42	9.7	11.2	K2	2	..	38400b
42	1016	53.2	-11 48	8.9	9.9	Ko	7	..	24605b	92	1562	53.5	-50 48	10.1	10.9	K	1	..	38400b
43	1032	53.2	-13 52	7.7	7.7	B9	4	..	20232b	93	711	53.5	-55 24	9.2	10.4	K	1	..	39700b
44	962	53.2	-18 26	8.9	9.7	G5	3	..	12628b	94	715	53.5	-57 35	8.4	9.4	A3	3	..	42691b
45	2019	53.2	-33 38	8.5	9.4	Ko	3	2,2	46020b	95	380	53.5	-64 0	9.4	9.5	A3	4	..	38371b
46	437	53.2	-58 43	6.12	6.5	F5	10	..	42691b	96	1103	53.6	+50 6	8.82	9.38	G	2	..	38125i
47	795	53.3	+14 24	8.0	8.0	B9	9	..	4420m	97	831	53.6	+20 2	8.50	9.50	Ko	2	0,2	38213i
48	1109	53.3	-5 25	9.3	9.3	A	2	..	14664b	98	768	53.6	+7 59	var.	var.	Pec.	..	R	M
49	1039	53.3	-9 55	9.26	9.82	Go	7	..	24605b	99	990	53.6	-4 43	8.3	8.3	B9	5	..	17409b
50	1033	53.3	-13 52	9.6	9.9	Fo	4	..	24605b	100	1059	53.6	-10 10	10.5	11.1	Go	1	..	24605b

THE HENRY DRAPER CATALOGUE.

31800

4^h53^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1659	m. 53.6	° -40 1	8.55	9.4	Go	3	..	42101b	51	2027	m. 54.0	° -33 14	7.85	9.1	K2	5	..	46020b
2	1694	53.6	-42 56	8.4	9.1	Go	5	..	42090b	52	1565	54.0	-50 0	8.70	9.2	Fo	6	..	38400b
3	1579	53.6	-47 44	9.9	10.9	Go	2	..	38400b	53	295	54.0	-71 44	9.1	9.5	F5	3	..	20540b
4	398	53.6	-59 17	8.6	9.5	Ko	3	..	42691b	54	450	54.1	+65 31	9.2	9.2	Ao	3	..	38907i
5	1159	53.7	+43 25	8.6	8.9	Fo	2	..	38088i	55	1024	54.1	+45 46	7.42	7.76	F2	7	2,3 R	38088i
6	716	53.7	+27 9	6.59	6.57	B9	7	..	37387i	56	795	54.1	+22 27	8.6	8.6	B9	4	E	38153i
7	765	53.7	-1 7	8.8	9.4	Go	1	..	14949b	57	679	54.1	+16 40	9.8	10.6	G5	2	..	4420m
8	1004	53.7	-14 24	9.1	10.1	Ko	5	..	24605b	58	1083	54.1	-2 18	7.9	8.0	A2	4	..	17409b
9	1005	53.7	-14 37	8.9	9.0	A2	7	..	24605b	59	1938	54.1	-26 32	8.2	10.1	K5	2	..	20533b
10	1001	53.7	-16 56	6.60	6.66	A2	7	..	20232b	60	2023	54.1	-35 3	7.69	8.5	Ko	7	..	20526b
11	972	53.7	-20 21	9.1	9.7	G5	2	..	17402b	61	1629	54.1	-46 52	9.2	9.5	F8	6	..	38400b
12	2715	53.7	-24 25	8.7	9.2	G5	4	..	17402b	62	1574	54.1	-48 36	9.3	9.8	Fo	4	..	38400b
13	2130	53.7	-25 13	8.07	9.4	K5	5	..	17402b	63	163	54.2	+79 22	8.9	9.0	A3	5	..	37558i
14	188	53.8	+76 30	8.1	8.4	Fo	4	0,2	37558i	64	722	54.2	+62 57	8.6	9.2	Go	5	..	38907i
15	269	53.8	+73 57	8.6	9.6	Ko	1	..	37630i	65	723	54.2	+62 57	8.6	9.2	Go	5	..	38907i
16	1128	53.8	+40 5	7.47	8.65	K5	6	..	37365i	66	1077	54.2	+44 15	7.21	7.27	A2	7	0,3	38088i
17	975	53.8	+36 29	7.17	7.17	Ao	8	2,4	37365i	67	722	54.2	+25 0	7.96	8.74	G5	4	..	38153i
18	677	53.8	+16 31	9.8	10.8	Ko	2	..	4420m	68	714	54.2	+15 9	9.5	10.3	G5	2	..	4420m
19	799	53.8	+14 46	9.3	10.1	G5	4	..	4420m	69	1863	54.2	-28 12	9.1	10.0	G5	1	..	20533b
20	1040	53.8	-6 26	9.1	9.5	F5	2	..	14664b	70	2061	54.2	-32 58	8.8	10.0	Ko	2	..	46020b
21	994	53.8	-8 4	9.1	9.2	A3	8	..	24605b	71	2024	54.2	-35 21	8.8	10.3	K5	3	..	20526b
22	1042	53.8	-9 29	8.3	8.9	Go	8	..	24605b	72	1619	54.2	-43 38	9.2	10.0	F8	2	..	42090b
23	1019	53.8	-11 36	10.0	10.4	F5	2	..	24605b	73	1566	54.2	-50 22	10.6	10.7	Ao	2	..	38400b
24	1715	53.8	-39 20	9.4	10.1	Go	2	..	42101b	74	1313	54.2	-51 37	7.9	8.7	Ko	6	..	38400b
25	1695	53.8	-42 9	7.6	8.1	A2	8	..	42090b	75	398	54.2	-62 58	7.5	7.5	Ao	7	..	38371i
26	1792	53.8	-44 21	7.7	9.1	Ko	5	5,4	42090b	76	282	54.2	-73 53	9.2	9.8	Go	1	..	20540b
27	1309	53.8	-51 12	8.3	9.2	G5	7	..	38400b	77	494	54.3	+64 45	9.5	9.6	A5	3	..	38907i
28	611	53.8	-52 43	8.9	10.1	K2	2	..	39700b	78	1107	54.3	+50 6	8.77	9.19	F5	2	..	38125i
29	800	53.9	+14 52	10.1	11.1	Ko	1	..	4420m	79	997	54.3	+38 15	8.8	9.1	F	4	..	37365i
30	695	53.9	+12 40	8.3	9.7	Ma	..	..	M	80	789	54.3	+24 1	8.0	8.3	F2	5	..	38153i
31	992	53.9	-3 58	9.3	9.3	Ao	3	..	14949b	81	860	54.3	+20 47	8.2	8.3	A2	6	..	38153i
32	1060	53.9	-10 27	10.5	11.1	G	1	..	24605b	82	995	54.3	-4 45	8.7	9.0	Fo	4	..	17409b
33	1035	53.9	-13 25	10.9	11.0	A3	2	..	24605b	83	941	54.3	-7 13	9.6	9.6	A	1	..	14664b
34	1036	53.9	-13 26	10.5	11.3	G5	2	..	24605b	84	1043	54.3	-9 39	10.0	10.6	Go	2	..	24605b
35	909	53.9	-15 40	9.6	10.1	F8	2	..	24605b	85	1039	54.3	-13 7	9.3	9.3	Ao	8	..	24605b
36	964	53.9	-22 10	7.39	7.8	Ao	9	..	17402b	86	1038	54.3	-13 40	9.8	10.4	Go	3	..	24605b
37	R	53.9	-22 58	8.9	9.7	G5	2	..	17402b	87	966	54.3	-17 58	7.20	8.38	K5	7	..	12628b
38	1809	53.9	-38 3	8.8	9.4	Go	3	..	42101b	88	2135	54.3	-25 12	9.7	9.7	Fo	1	..	20533b
39	1624	53.9	-46 42	8.3	9.7	Ko	6	..	38400b	89	1567	54.3	-50 40	9.0	9.2	F2	7	..	38400b
40	734	53.9	-54 1	9.1	10.0	Ko	1	..	39700b	90	772	54.3	-53 11	8.3	9.2	K2	4	..	39700b
41	280	53.9	-73 10	8.0	8.6	Go	7	..	20540b	91	294	54.4	+69 16	8.8	9.9	K2	2	3,2	38112i
42	281	53.9	-73 48	9.1	9.5	F5	2	..	20540b	92	749	54.4	+61 15	9.2	9.3	A2	2	3,2 R	38952i
43	1196	54.0	+48 40	8.4	8.4	B8	6	..	38125i	93	851	54.4	+54 42	8.8	9.8	Ko	1	..	38970i
44	1023	54.0	+45 17	7.77	7.75	B9	6	..	38088i	94	1164	54.4	+43 17	8.4	8.3	B5	4	R	38088i
45	713	54.0	+15 46	6.70	7.12	F5	7	0,9	37544i	95	1033	54.4	+41 51	8.0	9.0	Ko	2	..	38088i
46	1040	54.0	-12 23	8.9	9.3	F5	7	..	24605b	96	998	54.4	+38 11	9.5	9.8	F	4	..	37365i
47	1037	54.0	-12 59	9.2	10.3	K2	5	..	24605b	97	834	54.4	+19 37	9.3	9.3	A	1	..	38213i
48	910	54.0	-14 56	7.43	7.49	A2	3	..	20232b	98	996	54.4	-4 21	8.2	9.4	K5	2	..	14949b
49	1009	54.0	-16 22	9.1	10.1	Ko	2	..	12628b	99	1061	54.4	-10 20	9.6	10.7	K2	4	..	24605b
50	1982	54.0	-27 20	9.5	9.8	F8	2	..	20533b	100	1020	54.4	-11 33	9.3	9.3	Ao	7	..	24605b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

31900

4^h 54^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	912	54.4	-14 56	8.81	8.87	A2	5	..	24605b	51	732	54.7	+ 4 2	8.8	8.9	A2	2	..	38183i
2	967	54.4	-18 18	9.3	9.8	F8	2	..	45972b	52	1063	54.7	-10 30	8.1	9.1	Ko	8	..	24605b
3	975	54.4	-20 42	8.8	9.5	Go	3	..	17402b	53	1023	54.7	-11 49	10.5	11.7	K5	1	..	24605b
4	2122	54.4	-31 8	8.0	9.4	Ko	2	..	20533b	54	1041	54.7	-13 38	10.5	10.8	Fo	3	..	24605b
5	2029	54.4	-32 59	8.1	9.1	K2	4	..	46020b	55	1008	54.7	-14 29	9.6	10.8	K5	2	..	24605b
6	753	54.4	-56 35	7.3	8.8	Ko	3	..	42691b	56	968	54.7	-22 49	9.3	9.7	F8	1	..	17402b
7	360	54.4	-67 27	9.0	10.1	K2	3	..	20430b	57	1991	54.7	-27 36	8.1	8.3	A2	6	..	20533b
8	132	54.4	-79 59	7.92	7.6	A3	8	..	15162b	58	2035	54.7	-33 37	9.1	10.1	G5	2	..	46020b
9	360	54.5	+68 47	8.9	9.9	Ko	1	..	38112i	59	1498	54.7	-49 47	10.1	9.5	F5	5	..	38400b
10	856	54.5	+60 18	4.22	4.78	Gop	..	O, R	1786c	60	362	54.7	-60 31	8.5	9.2	A5	3	..	42691b
11	855	54.5	+60 15	8.8	8.9	A5	4	..	38136i	61	290	54.7	-68 28	9.0	9.6	Go	2	..	38367i
12	1009	54.5	+51 32	8.7	8.8	A3	3	..	38970i	62	174	54.8	+81 50	9.9	9.9	A	2	..	37558i
13	1138	54.5	+39 49	var.	var.	G5	6	R	37365i	63	559	54.8	+63 25	9.0	9.6	Go	2	..	38907i
14	1011	54.5	+37 14	9.5	9.5	Ao	2	..	37365i	64	1166	54.8	+43 40	var.	var.	F5p	..	R	2310c
15	791	54.5	+23 41	9.4	9.4	Ao	2	..	38153i	65	784	54.8	+29 11	8.2	8.2	Ao	4	..	38161i
16	797	54.5	+22 28	9.0	9.0	B8	3	R	38153i	66	804	54.8	+14 14	6.72	7.28	Go	6	O,9	37544i
17	715	54.5	+15 58	10.5	11.3	G5	1	..	4420m	67	964	54.8	- 3 46	9.6	10.0	F5	2	..	14949b
18	685	54.5	+10 14	8.12	8.20	A3	3	E	38075i	68	998	54.8	- 4 31	8.9	10.1	K5	1	..	14664b
19	1088	54.5	- 2 13	9.1	9.1	B9	6	..	14949b	69	1044	54.8	-12 40	9.6	10.6	Ko	3	..	24605b
20	1044	54.5	- 5 56	9.3	9.4	A2	3	..	14664b	70	914	54.8	-15 54	8.6	9.2	Go	4	..	12628b
21	998	54.5	- 7 56	8.1	9.3	K5	5	..	24605b	71	977	54.8	-20 48	9.1	9.4	A3	4	..	17402b
22	1042	54.5	-11 58	9.6	10.8	K5	2	..	24605b	72	2126	54.8	-31 48	8.9	9.7	G5	3	..	20533b
23	1041	54.5	-12 55	8.3	8.6	F2	10	..	24605b	73	1801	54.8	-44 47	10.3	10.0	A2	3	..	42090b
24	1040	54.5	-13 13	8.5	9.9	Ma	6	..	24605b	74	1587	54.8	-47 26	9.0	9.2	Fo	6	..	38400b
25	1013	54.5	-16 32	5.54	5.88	F2	10	..	20232b	75	332	54.8	-72 35	6.18	6.8	F5	9	..	20540b
26	968	54.5	-18 18	9.3	10.1	G5	2	..	45972b	76	68	54.8	-87 7	8.5	9.5	Ko	4	..	15145b
27	1986	54.5	-27 5	9.7	10.1	Ko	1	..	20533b	77	1004	54.9	+38 38	7.8	8.8	Ko	6	..	37365i
28	2104	54.5	-30 34	8.7	8.8	F2	4	..	20533b	78	1003	54.9	+38 9	9.8	9.8	A	2	..	37365i
29	736	54.5	-54 46	8.9	9.8	F8	2	..	39700b	79	1014	54.9	+37 15	8.1	8.1	Ao	6	..	37365i
30	384	54.5	-64 7	7.9	8.4	F8	7	..	38371b	80	761	54.9	+13 40	9.1	9.2	A3	3	..	4420m
31	393	54.5	-65 8	10.0	10.4	F5	1	..	38371b	81	697	54.9	+12 26	8.2	8.2	Ao	3	..	38204i
32	99	54.5	-82 42	8.3	9.5	K5	5	3,4	20538b	82	705	54.9	+ 9 32	8.0	8.5	F8	3	..	38075i
33	783	54.6	+ 5 46	9.1	10.1	Ko	3	..	38410b	83	1114	54.9	- 5 18	8.9	8.9	B9	4	..	17409b
34	999	54.6	- 8 55	9.8	10.1	F2	2	..	24605b	84	1065	54.9	-10 28	9.1	9.7	Go	8	..	24605b
35	1044	54.6	- 9 16	9.1	10.1	Ko	3	..	24605b	85	1025	54.9	-11 8	10.9	12.1	K5	2	..	24605b
36	1045	54.6	- 9 19	7.9	8.0	A2	3	..	2298b	86	1666	54.9	-40 43	9.1	9.4	Go	2	..	42101b
37	2719	54.6	-24 21	9.7	9.4	A2	4	..	17402b	87	1650	54.9	-41 42	8.3	9.4	Ko	3	..	42090b
38	1868	54.6	-28 9	9.4	9.7	F8	2	..	20533b	88	1754	54.9	-45 18	9.2	10.0	K2	3	2,3-	18482b
39	1978	54.6	-29 3	7.50	9.2	K5	7	..	20533b	89	95	54.9	-83 16	9.8	9.9	A2	3	..	20557b
40	2034	54.6	-33 51	8.6	9.4	Ao	6	..	46020b	90	1287	55.0	+49 23	8.0	9.0	Ko	4	..	38125i
41	1816	54.6	-38 11	9.7	9.8	F5	1	..	42101b	91	1079	55.0	+44 52	8.4	8.5	A3	4	..	38088i
42	1697	54.6	-42 29	8.9	9.7	Ko	2	..	42090b	92	1005	55.0	+38 11	8.8	8.7	B5	2	..	37365i
43	1623	54.6	-43 11	7.4	8.6	Ao	7	..	42090b	93	733	55.0	+ 3 8	8.4	9.5	K2	2	..	38075i
44	1800	54.6	-44 29	10.1	10.0	Go	2	..	42090b	94	1046	55.0	- 9 7	9.3	9.8	F8	4	..	24605b
45	1497	54.6	-49 8	8.7	9.8	G5	5	..	38400b	95	1043	55.0	-13 54	10.2	11.0	G5	2	..	24605b
46	774	54.6	-53 1	7.5	8.5	A2	7	..	39700b	96	915	55.0	-14 57	var.	var.	Pec.	..	R	M
47	302	54.6	-69 21	Neb.	Neb.	Pc	..	R	76,21	97	716	55.0	-55 18	10.0	10.0	Ao	2	..	39700b
48	1108	54.7	+50 20	9.2	9.2	A	2	..	38125i	98	755	55.0	-56 33	7.5	9.1	G5	3	..	42691b
49	1128	54.7	+42 12	7.7	8.2	F8	4	..	38088i	99	96	55.0	-83 23	8.9	9.9	Ko	3	..	20557b
50	803	54.7	+14 56	9.5	10.1	G	1	..	4420m	100	203	55.1	+75 45	8.77	8.77	Ao	4	O,3	37343i

THE HENRY DRAPER CATALOGUE.

32000

4^h 55^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	724	55.1	+62 29	9.0	9.6	Go	2	..	38907i	51	1141	55.4	+40 12	8.92	8.92	Ao	4	..	37365i
2	1110	55.1	+50 27	8.2	8.2	Ao	4	..	38125i	52	1019	55.4	+37 36	10.0	10.0	Ao	2	..	37365i
3	796	55.1	+23 17	8.1	8.1	Ao	7	E	38153i	53	1020	55.4	+37 14	9.4	9.4	Ao	2	..	37365i
4	680	55.1	+16 58	9.3	9.4	A2	4	..	4420m	54	953	55.4	+35 47	8.6	9.4	G5	1	..	38934i
5	699	55.1	+12 29	8.2	8.2	Ao	3	..	38204i	55	787	55.4	+29 31	8.5	8.5	Ao	3	..	38161i
6	1092	55.1	- 2 55	8.9	9.9	Ko	2	..	14949b	56	738	55.4	+ 3 8	8.0	8.0	B9	3	..	38075i
7	1000	55.1	- 7 58	8.8	8.8	B9	9	..	24605b	57	1052	55.4	- 6 20	8.3	9.1	G5	1	..	17409b
8	1066	55.1	-10 25	5.69	6.69	Ko	7	..	20232b	58	1069	55.4	-10 52	9.6	10.6	Ko	2	..	24605b
9	1878	55.1	-28 11	9.5	9.8	F5	2	..	20533b	59	..	55.4	-12 32	..	..	Ao	1	..	24605b
10	1822	55.1	-37 59	9.7	10.3	Go	1	..	42101b	60	1044	55.4	-13 18	10.2	10.5	Fo	2	..	24605b
11	613	55.1	-52 18	8.9	9.8	B9	3	..	38400b	61	973	55.4	-18 48	8.3	9.3	Ko	3	5,2	45972b
12	717	55.1	-55 46	7.7	8.8	A2	4	..	42691b	62	970	55.4	-22 34	7.9	8.6	G5	6	..	17402b
13	385	55.1	-61 47	9.7	10.1	F5	1	..	38371i	63	2038	55.4	-35 40	10.3	10.6	F5	2	..	46020b
14	..	55.1	-69 21	Neb.	Neb.	Pc	..	R	76,21	64	1575	55.4	-50 44	7.7	8.3	G5	8	..	38400b
15	561	55.2	+64 0	8.4	8.5	A3	4	..	38907i	65	440	55.4	-58 14	6.88	7.2	F2	9	..	42691b
16	852	55.2	+54 47	8.16	8.72	Go	2	..	14302i	66	189	55.5	+76 28	8.2	9.3	K2	2	..	37558i
17	1170	55.2	+43 36	9.0	9.0	Ao	3	..	38088i	67	843	55.5	+53 21	8.8	9.9	K2	1	..	38970i
18	774	55.2	+26 24	7.8	7.7	B5	3	..	37387i	68	..	55.5	+40 56	..	..	Ko	..	0, R	1567c
19	716	55.2	+15 42	9.8	11.0	K5	1	..	4420m	69	1142	55.5	+40 56	3.94	4.94	B1	..	0, R	1567c
20	808	55.2	+14 20	8.8	8.9	A5	6	3,2	4420m	70	726	55.5	+24 31	8.5	9.3	G5	3	..	38153i
21	688	55.2	+10 46	6.60	6.58	B9	7	E	37544i	71	830	55.5	+ 9 3	8.6	9.4	G5	2	..	38204i
22	808	55.2	+ 4 57	7.95	8.73	G5	2	..	38075i	72	784	55.5	+ 5 42	8.8	8.9	A5	2	..	38075i
23	916	55.2	+ 0 52	9.1	9.5	F5	3	..	46195b	73	811	55.5	+ 4 26	7.10	8.10	Ko	5	..	38075i
24	818	55.2	- 0 20	8.2	8.5	F2	4	..	38183i	74	1003	55.5	- 8 10	8.8	9.9	K2	3	..	24605b
25	1001	55.2	- 8 15	9.3	10.3	Ko	3	..	24605b	75	1028	55.5	-11 27	9.3	10.3	Ko	5	..	24605b
26	1047	55.2	- 9 54	10.0	10.0	Ao	4	..	24605b	76	1027	55.5	-11 42	10.5	11.1	G	2	..	24605b
27	1067	55.2	-10 56	10.5	11.1	Go	2	..	24605b	77	1018	55.5	-15 57	8.5	8.5	Ao	7	..	12628b
28	916	55.2	-15 16	9.3	10.3	Ko	2	..	24605b	78	2143	55.5	-25 32	7.9	8.6	A3	6	..	20533b
29	917	55.2	-15 32	9.3	9.3	Ao	4	..	12628b	79	2078	55.5	-32 24	6.74	8.2	Ko	8	..	24442b
30	1879	55.2	-28 36	7.53	8.5	G5	8	..	20533b	80	2077	55.5	-32 57	10.3	10.0	Go	2	..	46020b
31	1651	55.2	-41 49	8.5	10.6	K2	1	..	42090b	81	1805	55.5	-44 44	8.6	8.9	Fo	6	2,7	18482b
32	1591	55.2	-47 47	10.3	10.6	F8	2	..	38400b	82	1596	55.5	-47 36	10.3	10.9	Go	1	..	38400b
33	776	55.2	-53 10	9.5	9.8	F2	2	..	39700b	83	1582	55.5	-48 56	9.9	10.7	Go	2	..	38400b
34	364	55.2	-67 20	..	10.1	Pec.	4	R	20430b	84	739	55.5	-54 20	8.3	9.5	Ko	5	..	39700b
35	334	55.2	-72 56	7.18	7.6	Ao	9	..	20540b	85	386	55.5	-63 16	10.0	10.6	G	1	..	38371i
36	845	55.3	+31 38	7.50	7.48	B9	5	1,5	37387i	86	271	55.6	+73 27	8.0	8.0	Ao	4	E	37343i
37	809	55.3	+15 3	8.84	9.91	K2	1	..	4420m	87	290	55.6	+71 56	8.0	9.1	K2	2	..	38112i
38	765	55.3	+13 8	9.1	10.1	Ko	2	..	4420m	88	1112	55.6	+50 29	9.0	..	Nb	..	..	M
39	736	55.3	+ 3 28	6.95	6.95	Ao	5	..	38075i	89	1205	55.6	+48 24	8.6	8.6	Ao	3	..	38125i
40	737	55.3	+ 3 28	6.63	6.63	Ao	7	..	38075i	90	1140	55.6	+42 55	9.0	9.0	A	1	..	38088i
41	1094	55.3	- 2 5	8.5	9.5	Ko	4	..	14949b	91	1141	55.6	+42 21	9.2	9.3	A2	2	..	38088i
42	1118	55.3	- 5 22	9.3	9.4	A2	2	..	14664b	92	775	55.6	+26 32	6.86	7.28	F5	6	3,7	37387i
43	1051	55.3	- 6 27	8.1	8.1	B9	5	..	17409b	93	776	55.6	+26 30	8.8	9.6	G5	2	..	38161i
44	1068	55.3	-10 31	9.8	9.9	A3	5	..	24605b	94	810	55.6	+14 34	9.3	9.8	F8	2	..	4420m
45	1047	55.3	-12 41	4.85	5.13	Fo	..	R	56,78	95	811	55.6	+14 4	8.6	9.4	G5	2	..	4420m
46	969	55.3	-22 1	9.1	9.7	F5	1	..	17402b	96	769	55.6	+13 58	7.9	8.7	G5	7	5,3	4420m
47	1652	55.3	-41 4	8.5	10.0	K5	2	..	42101b	97	918	55.6	+ 0 16	8.9	9.0	A2	2	..	38183i
48	1757	55.3	-44 59	9.22	10.3	Ko	2	2,1	42090b	98	820	55.6	- 0 10	8.4	8.5	A2	1	..	38183i
49	361	55.4	+68 50	6.80	7.14	F2	6	0,8	38112i	99	1004	55.6	- 8 48	8.8	8.8	Ao	8	..	24605b
50	952	55.4	+46 31	7.6	7.6	B9	6	0,4	38088i	100	1048	55.6	-12 15	10.2	11.3	K2	1	..	24605b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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4^h 55^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1066	55.6	-18 59	9.3	9.8	G5	1	..	12628b	51	1040	55.9	-21 2	9.1	9.7	Ko	2	..	17402b
2	2001	55.6	-27 46	8.9	9.7	G5	2	..	20533b	52	1977	55.9	-37 2	7.05	7.2	F5	8	..	42101b
3	1988	55.6	-29 29	9.5	10.6	Ko	1	..	20533b	53	1629	55.9	-43 42	8.9	9.7	F5	2	..	42090b
4	2040	55.6	-35 14	9.5	10.9	Go	1	..	46020b	54	1628	55.9	-43 51	7.7	9.1	F8	4	..	18482b
5	777	55.6	-53 33	8.4	9.8	Ko	3	..	39700b	55	753	56.0	+61 8	9.0	9.5	F8	2	..	38907i
6	742	55.6	-53 59	8.5	9.7	Go	4	..	39700b	56	856	56.0	+54 44	8.0	8.1	A2	4	..	14302i
7	387	55.6	-63 42	8.8	9.8	Ko	3	..	38371b	57	1026	56.0	+37 31	9.0	9.0	Ao	2	..	37365i
8	389	55.6	-64 44	8.8	9.6	G5	3	..	38371b	58	791	56.0	+29 51	9.0	9.4	F5	1	..	38161i
9	..	55.6	-67 40	..	..	Oa	..	..	M	59	839	56.0	+19 48	8.8	9.1	F2	2	..	38213i
10	159	55.6	-79 31	8.8	9.8	Ko	4	2,2	15162b	60	704	56.0	+12 10	8.3	9.1	G5	3	..	37544i
11	732	55.7	+28 9	8.0	8.0	Ao	5	2,2	38161i	61	880	56.0	+2 0	8.8	9.6	G5	1	..	14663b
12	719	55.7	+15 37	8.0	9.1	K2	5	..	4420m	62	920	56.0	+0 39	8.8	9.6	G5	2	..	38183i
13	812	55.7	+15 3	8.74	9.02	Fo	4	5,3	4420m	63	921	56.0	-15 54	9.3	10.3	Ko	3	..	24605b
14	823	55.7	-0 39	8.9	8.9	Ao	1	..	38183i	64	1072	56.0	-19 47	8.33	9.2	Ko	5	..	17402b
15	1095	55.7	-2 13	6.26	6.40	A5	9	..	17409b	65	2006	56.0	-27 4	10.6	10.1	F8	1	..	20533b
16	1005	55.7	-8 26	8.7	9.0	Fo	7	..	24605b	66	2080	56.0	-32 14	9.9	10.0	Go	2	..	46020b
17	1070	55.7	-10 0	10.2	10.5	F	2	..	24605b	67	1994	56.0	-34 39	10.1	10.9	A3	2	..	46020b
18	1049	55.7	-12 39	10.7	11.5	G5	1	..	24605b	68	1676	56.0	-40 2	9.1	10.1	Go	1	..	42101b
19	1013	55.7	-14 54	10.2	10.3	A2	2	..	24605b	69	1630	56.0	-43 33	7.4	8.8	F5	6	5,7	42090b
20	1022	55.7	-16 4	8.5	9.6	K2	3	..	12628b	70	1599	56.0	-47 29	9.0	10.0	G5	4	..	38400b
21	2002	55.7	-27 13	9.4	10.0	Ko	1	..	20533b	71	1503	56.0	-49 23	9.3	10.7	K2	2	..	38400b
22	2040	55.7	-33 8	9.5	10.0	F8	2	..	46020b	72	252	56.1	+72 47	8.5	8.8	Fo	3	..	37630i
23	2041	55.7	-35 49	9.1	10.3	Ko	2	..	20526b	73	792	56.1	+29 53	9.4	10.0	G	1	..	38161i
24	1658	55.7	-41 6	10.1	9.4	F5	3	..	42101b	74	747	56.1	+21 10	8.7	9.7	Ko	1	5,1	38213i
25	..	55.7	-66 26	..	..	Oa	..	R	76,28	75	685	56.1	+16 41	9.1	9.4	Fo	4	..	4420m
26	845	55.8	+53 6	8.9	9.2	Fo	2	..	38970i	76	825	56.1	-0 18	8.8	9.2	F5	3	..	14949b
27	863	55.8	+20 40	8.0	8.6	Go	4	..	38153i	77	1031	56.1	-10 58	9.6	10.1	F8	5	..	24605b
28	721	55.8	+15 5	8.29	9.29	Ko	4	..	4420m	78	1048	56.1	-13 3	10.9	11.0	A2	2	..	24605b
29	813	55.8	+14 56	8.84	9.34	F8	3	..	4420m	79	1047	56.1	-13 40	7.28	7.28	Ao	5	..	20232b
30	774	55.8	+7 44	8.2	8.7	F8	2	..	38204i	80	1888	56.1	-27 58	9.9	9.7	Go	2	..	20533b
31	786	55.8	+5 11	9.8	11.2	Ma	..	..	M	81	1992	56.1	-29 1	9.4	9.4	K2	3	..	20533b
32	973	55.8	-3 25	9.3	9.3	Ao	3	..	14949b	82	1993	56.1	-29 44	8.0	9.4	Ko	4	0,4	24442b
33	1029	55.8	-11 2	9.6	10.1	F8	5	..	24605b	83	1996	56.1	-34 17	10.5	9.8	F5	1	..	20526b
34	1050	55.8	-12 41	10.9	11.3	F5	2	..	24605b	84	283	56.1	-73 42	9.2	9.6	F5	1	..	20540b
35	2148	55.8	-25 13	7.36	7.9	Fo	9	..	20533b	85	754	56.2	+62 1	9.2	9.2	Ao	3	R	38907i
36	2043	55.8	-33 45	9.5	10.0	G5	1	..	46020b	86	847	56.2	+60 3	7.96	8.06	Ko	3	..	38136i
37	1809	55.8	-44 50	9.02	10.0	Ko	2	0,2	18482b	87	846	56.2	+53 15	9.7	9.7	Ao	1	..	38970i
38	1759	55.8	-45 27	7.6	8.5	Ao	7	1,8	42090b	88	1044	56.2	+41 18	6.20	6.20	Ao	5	0,8-	2219b
39	722	55.8	-55 40	8.5	9.5	Ao	3	..	42691b	89	1150	56.2	+40 24	7.67	7.95	Fo	6	5,2	37365i
40	400	55.8	-62 37	8.5	9.5	Ko	3	..	38371b	90	804	56.2	+23 53	8.6	8.5	B5	3	..	38213i
41	363	55.9	+68 7	8.7	8.7	Ao	2	..	38112i	91	741	56.2	+3 21	8.8	9.9	K2	1	..	14663b
42	801	55.9	+58 43	8.6	9.4	G5	3	..	38136i	92	1050	56.2	-9 22	8.9	8.9	B9	8	..	24605b
43	1142	55.9	+42 25	8.0	8.0	B8	6	..	38088i	93	1996	56.2	-29 9	11.1	10.1	Ao	2	..	20533b
44	806	55.9	+6 5	8.8	10.0	K5	2	..	38410b	94	2084	56.2	-32 33	9.9	9.7	Go	2	..	46020b
45	739	55.9	+3 35	6.93	6.88	B8	6	..	38075i	95	133	56.2	-80 57	7.8	8.4	Go	6	..	20557b
46	1002	55.9	-4 36	9.1	9.2	A2	4	2,2	14949b	96	74	56.3	+85 50	6.54	6.68	A5	8	..	37546i
47	1123	55.9	-5 52	6.50	7.50	Ko	7	R	17409b	97	453	56.3	+65 40	9.2	9.3	A2	2	..	38907i
48	947	55.9	-7 41	9.3	9.4	A2	2	..	14664b	98	1174	56.3	+43 11	9.5	9.5	Ao	2	..	38088i
49	1024	55.9	-16 15	8.6	9.6	Ko	4	..	12628b	99	730	56.3	+24 20	8.6	9.4	G5	1	..	38213i
50	1025	55.9	-16 21	10.2	10.2	Ao	1	..	24605b	100	723	56.3	+16 2	8.6	9.1	F8	6	0,2	4420m

THE HENRY DRAPER CATALOGUE.

32200

4^h 56^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	777	56.3	+13 30	9.3	10.1	G5	4	..	4420m	51	986	56.6	-20 54	9.3	9.4	Fo	5	..	17402b
2	702	56.3	+11 15	6.94	6.89	B8	6	E	37544i	52	2088	56.6	-31 58	7.9	8.2	Ao	7	..	24442b
3	808	56.3	+7 0	8.8	9.3	F8	3	..	38410b	53	619	56.6	-52 24	9.2	10.1	F8	2	..	39700b
4	1033	56.3	-11 51	11.1	11.2	A3	1	..	24605b	54	390	56.6	-63 22	10.2	10.6	F5	1	..	38371b
5	1009	56.3	-17 44	8.1	8.5	F5	3	..	12628b	55	394	56.6	-65 10	7.26	6.8	Ao	8	..	38371b
6	1998	56.3	-34 19	7.7	7.7	Ao	10	..	20526b	56	344	56.6	-66 34	Neb.	Neb.	Pec.	..	R	76,21
7	1731	56.3	-39 35	8.3	9.7	F8	3	..	42101b	57	..	56.6	-69 37	..	..	O	..	R	M
8	746	56.3	-54 19	7.5	8.5	Fo	8	..	39700b	58	190	56.6	-77 12	8.5	9.3	G5	5	..	15162b
9	441	56.3	-58 8	8.0	7.5	Ao	9	..	42691b	59	779	56.7	+13 46	7.8	8.4	Go	4	0,8	37544i
10	387	56.3	-61 27	8.4	8.7	F5	6	..	38371b	60	839	56.7	+8 47	8.8	9.9	K2	2	..	38410b
11	388	56.3	-63 17	9.6	10.4	G5	1	..	38371b	61	742	56.7	+3 44	8.9	8.9	Ao	2	..	14663b
12	1292	56.4	+49 22	7.9	7.9	B9	5	..	38125i	62	884	56.7	+1 55	8.8	9.1	F	2	..	14663b
13	1027	56.4	+37 5	8.5	8.9	F5	4	..	37365i	63	923	56.7	+0 34	6.18	7.18	Ko	8	..	38183i
14	710	56.4	+9 40	9.3	9.4	A2	2	..	38204i	64	1104	56.7	-2 52	8.1	8.1	Ao	3	..	17409b
15	809	56.4	+6 36	8.4	8.4	Ao	4	..	38075i	65	1073	56.7	-10 48	8.1	8.9	G5	9	..	24605b
16	810	56.4	+6 30	9.11	10.46	Mb	..	..	M	66	1050	56.7	-13 14	9.1	10.3	K5	4	..	24605b
17	788	56.4	+5 54	9.1	9.2	A2	3	..	38410b	67	974	56.7	-22 45	9.3	9.8	Go	1	..	17402b
18	836	56.4	+2 47	8.4	9.2	G5	1	..	14663b	68	2015	56.7	-27 6	9.9	10.1	G5	1	..	20533b
19	826	56.4	-0 51	6.60	6.68	A3	8	..	17409b	69	388	56.7	-61 6	8.8	10.1	K2	2	..	38371b
20	1071	56.4	-10 1	9.36	10.36	Ko	5	..	24605b	70	1031	56.8	+37 7	7.46	7.41	B8	6	0,6	37260i
21	1037	56.4	-11 6	8.7	8.7	B9	7	..	24605b	71	725	56.8	+15 49	10.1	10.1	A	1	..	4420m
22	1036	56.4	-11 21	7.31	7.31	Ao	3	..	20232b	72	789	56.8	+5 59	8.6	9.2	Go	3	..	38410b
23	2137	56.4	-31 51	8.9	9.4	Go	3	..	24442b	73	886	56.8	+1 28	6.21	6.16	B8	8	..	38183i
24	1995	56.4	-36 46	8.0	9.1	Ko	4	..	42101b	74	924	56.8	+0 54	8.2	8.7	F8	3	..	38183i
25	1831	56.4	-38 12	10.5	10.5	G	1	..	42101b	75	1038	56.8	-11 36	10.0	10.8	G5	3	..	24605b
26	1510	56.4	-49 53	8.64	9.2	F8	4	..	38400b	76	2052	56.8	-35 54	9.1	10.4	Ko	1	..	20526b
27	442	56.4	-58 22	7.3	8.6	K2	7	..	42691b	77	1835	56.8	-38 9	9.1	9.7	G5	3	..	42101b
28	343	56.4	-66 38	..	10.2	Oa	..	..	76,28	78	1511	56.8	-49 37	7.08	7.3	Fo	9	..	38400b
29	331	56.4	-70 27	9.4	9.8	F5	3	..	20540b	79	..	56.8	-66 32	Neb.	Neb.	Pc	..	R	76,21
30	208	56.5	+75 33	7.27	7.27	Ao	8	2,8	37343i	80	297	56.9	+69 24	9.2	10.0	G5	2	..	38112i
31	207	56.5	+75 21	7.92	8.70	G5	4	0,3	37343i	81	1293	56.9	+49 24	9.0	9.0	A	1	..	38125i
32	857	56.5	+54 50	8.5	8.5	Ao	2	..	14302i	82	1154	56.9	+40 32	8.0	8.0	B8	6	..	37365i
33	1089	56.5	+47 31	7.08	8.08	Ko	5	5,2	38125i	83	743	56.9	+3 41	8.9	8.9	Ao	2	..	14663b
34	1152	56.5	+39 56	7.92	7.87	B8	6	..	37365i	84	1063	56.9	-6 47	9.1	9.2	A2	2	..	14664b
35	724	56.5	+15 33	9.8	10.4	Go	1	..	4420m	85	1051	56.9	-9 23	9.3	10.4	K2	3	..	24605b
36	815	56.5	+14 35	8.3	8.8	F8	5	0,2	4420m	86	1016	56.9	-14 18	8.8	9.8	Ko	5	..	24605b
37	778	56.5	+13 57	8.3	9.1	G5	6	..	4420m	87	1011	56.9	-17 42	7.92	8.34	F5	5	..	12628b
38	1125	56.5	-5 22	8.7	9.1	F5	3	3,3	14949b	88	975	56.9	-18 31	8.7	9.5	G5	3	..	45972b
39	1124	56.5	-5 51	9.3	9.4	A5	4	3,4	14664b	89	975	56.9	-22 53	9.3	9.4	Go	3	..	17402b
40	1072	56.5	-10 10	10.5	11.3	G5	2	..	24605b	90	1660	56.9	-41 12	7.7	8.1	A2	7	..	42101b
41	1996	56.5	-36 24	9.1	11.2	K2	1	..	46020b	91	1712	56.9	-42 39	8.4	9.7	Ko	2	..	42090b
42	1997	56.5	-36 58	8.8	9.4	F5	3	..	42101b	92	1637	56.9	-43 27	7.7	9.4	F5	4	0,3	42090b
43	1585	56.5	-50 18	9.0	9.6	Ko	4	..	38400b	93	1595	56.9	-48 36	9.9	10.7	F5	2	..	38400b
44	723	56.5	-55 38	8.4	9.8	Ko	2	..	39700b	94	747	56.9	-54 51	10.3	10.3	A	1	..	39700b
45	389	56.5	-63 38	10.2	10.2	Ao	2	..	38371b	95	1295	57.0	+49 46	8.6	9.0	F5	3	..	38125i
46	294	56.5	-68 29	8.9	9.5	Go	4	..	38367b	96	1032	57.0	+45 38	6.53	6.59	A2	5	0,8	2219b
47	733	56.6	+24 10	8.4	8.4	B9	4	..	38213i	97	777	57.0	+7 20	8.4	8.4	Ao	4	..	38075i
48	1126	56.6	-5 41	9.6	10.4	G5	1	..	14664b	98	759	57.0	-56 2	8.7	9.7	G5	3	..	39700b
49	948	56.6	-7 20	4.81	4.76	B8	..	R	56,78	99	409	57.0	-59 17	8.0	8.9	K2	5	..	42691b
50	1007	56.6	-8 52	8.7	9.9	K5	5	..	24605b	100	393	57.0	-64 40	9.9	10.9	Ko	1	..	38371b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

32300

4^h 57^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	751	57.1	+21 27	4.70	4.84	A5	..	R	56,78	51	818	57.4	+ 4 27	9.1	9.7	Go	2	..	14663b
2	781	57.1	+13 12	8.9	9.7	G5	3	..	4420m	52	1044	57.4	-11 14	9.3	10.4	K2	5	..	24605b
3	711	57.1	+ 9 31	8.4	8.5	A2	2	..	38204i	53	1971	57.4	-26 6	8.9	10.0	K5	1	..	20533b
4	778	57.1	+ 7 17	7.04	7.82	G5	5	..	38075i	54	2142	57.4	-30 13	10.4	10.0	G	2	R	24442b
5	980	57.1	- 3 4	9.3	9.3	B9	5	..	14949b	55	749	57.4	-54 49	9.4	10.4	Ko	1	..	39700b
6	1130	57.1	- 5 39	6.66	6.94	Fo	8	..	17409b	56	857	57.5	+61 2	6.27	7.27	Ko	5	..	36654i
7	1064	57.1	- 6 35	8.8	8.9	A2	2	..	14664b	57	805	57.5	+58 53	6.38	7.38	Ko	..	..	56,79
8	1040	57.1	-11 5	6.85	7.63	G5	9	..	24605b	58	1086	57.5	+44 49	8.8	8.9	A5	2	..	38088i
9	990	57.1	-20 12	4.99	4.97	B9	..	3,3	56,79	59	748	57.5	+ 3 19	8.0	8.0	B9	6	..	38075i
10	2336	57.1	-23 52	7.51	7.5	F2	8	..	17402b	60	978	57.5	-22 10	9.3	10.0	Ko	1	..	17402b
11	2020	57.1	-27 16	9.9	9.7	F8	2	..	20533b	61	2151	57.5	-31 49	8.9	9.7	Ko	3	..	24442b
12	1686	57.1	-40 15	8.8	9.8	G5	2	..	42101b	62	1594	57.5	-50 3	9.7	9.8	A5	4	..	38400b
13	1512	57.1	-49 17	7.9	9.2	G5	6	..	38400b	63	391	57.5	-63 22	7.9	8.4	F8	6	..	38371b
14	53	57.1	-85 51	10.1	10.2	A5	2	..	15145b	64	..	57.5	-68 35	Neb.	Neb.	Pd	..	R	76,21
15	912	57.2	+53 2	9.4	9.5	A2	1	..	38970i	65	948	57.6	+33 7	8.6	9.1	F8	2	..	38934i
16	1012	57.2	+38 43	8.2	8.2	B9	6	..	37365i	66	713	57.6	+ 9 14	7.8	7.8	Ao	6	..	38075i
17	993	57.2	+36 35	8.6	9.0	F5	1	..	38934i	67	815	57.6	+ 6 32	8.8	9.9	K2	2	..	38410b
18	815	57.2	+23 40	8.8	8.9	A2	4	R	38213i	68	1077	57.6	-19 49	7.68	7.9	Ao	9	..	17402b
19	817	57.2	+ 4 10	9.1	9.4	Fo	2	..	14663b	69	2146	57.6	-30 23	7.7	8.8	Ko	5	..	24442b
20	887	57.2	+ 1 56	8.2	8.2	Ao	3	E	38075i	70	2152	57.6	-31 33	8.0	9.4	Ko	5	..	24442b
21	1042	57.2	-10 56	10.5	10.9	F5	2	..	24605b	71	2011	57.6	-34 52	9.9	11.5	G5	1	..	46020b
22	1041	57.2	-11 32	10.5	11.7	K5	1	..	24605b	72	1667	57.6	-41 11	10.1	9.7	G5	2	..	42101b
23	1051	57.2	-13 1	9.3	10.5	K5	1	..	24605b	73	1598	57.6	-48 33	8.7	9.8	Ko	3	..	38400b
24	1045	57.2	-21 49	8.3	8.5	F5	6	..	17402b	74	1597	57.6	-50 22	9.5	10.1	Ko	2	..	38400b
25	2058	57.2	-33 34	10.5	10.0	A2	2	..	46020b	75	337	57.6	-70 56	8.8	9.6	G5	3	..	20540b
26	2058	57.2	-35 9	8.1	8.5	F5	7	..	20526b	76	100	57.6	-82 5	9.1	10.1	Ko	2	..	20557b
27	1736	57.2	-39 50	8.10	9.2	Ko	5	..	42101b	77	1157	57.7	+39 50	8.4	8.4	B9	6	..	37365i
28	1177	57.3	+43 35	8.0	8.0	B9	5	..	38088i	78	939	57.7	+34 29	8.6	9.2	Go	4	..	37365i
29	1152	57.3	+42 47	8.8	8.8	B9	3	..	38088i	79	949	57.7	+33 28	8.6	8.6	Ao	3	..	38934i
30	1046	57.3	+41 28	8.9	8.9	B9	2	..	38088i	80	824	57.7	+23 57	8.5	9.5	Ko	1	..	38213i
31	946	57.3	+33 45	10.0	10.0	Ao	2	..	37365i	81	1053	57.7	-12 9	10.5	10.9	F5	2	..	24605b
32	769	57.3	+30 29	8.6	8.6	Ao	3	..	38161i	82	1019	57.7	-14 12	9.1	10.3	K5	3	..	24605b
33	773	57.3	+25 37	8.6	9.4	G5	2	0,1	38161i	83	1656	57.7	-46 48	8.9	9.4	Go	6	..	38400b
34	816	57.3	+15 1	9.8	10.6	G5	1	..	4420m	84	394	57.7	-61 15	8.5	9.0	Go	4	..	38371b
35	782	57.3	+13 25	9.5	9.6	A2	2	..	4420m	85	284	57.7	-73 55	8.3	8.7	F5	4	..	15162b
36	747	57.3	+ 3 18	9.8	10.4	Go	2	..	14663b	86	1159	57.8	+39 40	8.2	9.3	K2	4	..	37365i
37	1043	57.3	-11 7	10.5	11.6	K2	2	..	24605b	87	739	57.8	+24 52	8.0	8.8	G5	4	..	38161i
38	1968	57.3	-26 55	9.4	9.7	F5	3	..	20533b	88	728	57.8	+15 57	9.8	10.8	Ko	2	..	4420m
39	394	57.3	-64 45	9.3	10.4	K2	2	..	38371b	89	819	57.8	+14 25	10.1	10.6	F8	1	..	4420m
40	..	57.3	-66 33	..	..	Pec.	..	R	76,21	90	714	57.8	+12 31	8.4	8.5	A5	2	..	38204i
41	339	57.4	+70 24	8.5	9.6	K2	2	..	38112i	91	718	57.8	+ 9 53	9.1	9.2	A2	2	..	38204i
42	298	57.4	+69 47	8.6	9.6	Ko	2	..	38112i	92	818	57.8	+ 7 4	7.8	8.3	F8	1	..	38204i
43	804	57.4	+58 50	5.31	5.14	B3p	..	R	56,79	93	1019	57.8	- 4 21	6.10	7.10	Ko	8	..	17409b
44	876	57.4	+32 14	8.4	8.4	Ao	3	0,3	38934i	94	1135	57.8	- 5 51	9.1	9.2	A5	3	..	14664b
45	869	57.4	+20 47	8.4	9.4	Ko	2	..	38213i	95	1055	57.8	- 9 3	7.30	8.30	Ko	10	..	24605b
46	817	57.4	+14 37	9.1	9.6	F8	3	..	4420m	96	1045	57.8	-11 53	10.6	11.1	F8	2	..	24605b
47	783	57.4	+13 35	9.3	10.3	Ko	4	..	4420m	97	1026	57.8	-16 18	8.1	8.2	A2	6	..	12628b
48	704	57.4	+11 54	7.06	7.40	F2	6	2,4	37567i	98	2156	57.8	-31 33	8.9	9.4	Go	3	..	24442b
49	697	57.4	+10 48	8.9	9.9	Ko	1	..	38204i	99	2012	57.8	-34 58	9.1	12.0	Ko	1	..	46020b
50	791	57.4	+ 5 41	8.4	8.4	Ao	2	..	14663b	100	1716	57.8	-42 9	7.6	9.4	Ma	3	..	42090b

THE HENRY DRAPER CATALOGUE.

32400

4^h 57^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1600	57.8	-48 46	9.5	9.5	F8	4	..	38400b	51	2354	58.2	-23 56	9.2	9.7	K2	2	..	17402b.
2	..	57.8	-68 33	..	..	Oa	..	..	76,28	52	1911	58.2	-28 13	9.1	9.8	G5	1	..	20533b
3	310	57.8	-69 0	9.2	10.3	K2	2	..	38367b	53	1744	58.2	-39 52	5.99	7.5	G5	..	..	56,121
4	1001	57.9	+56 28	8.0	8.1	A3	3	..	38970i	54	1521	58.2	-49 31	11.6	9.8	A2	3	..	38400b
5	1020	57.9	+51 6	8.6	9.6	Ko	2	..	38125i	55	301	58.3	+69 43	8.6	8.6	B9	4	..	38112i
6	772	57.9	+30 22	6.39	7.39	Ko	5	E	38921i	56	956	58.3	+55 13	7.91	8.69	G5	2	..	14302i
7	798	57.9	+29 45	8.6	8.6	A	2	R	38161i	57	1300	58.3	+49 55	7.17	7.15	B9	5	0.7	2219b
8	812	57.9	+22 24	9.0	9.0	Ao	3	..	38213i	58	1213	58.3	+48 25	9.4	9.5	A2	3	..	38125i
9	1054	57.9	-12 47	8.7	9.8	K2	6	..	24605b	59	1164	58.3	+40 25	8.8	9.2	F5	4	..	37365i
10	1021	57.9	-14 27	10.0	10.5	F8	1	..	24605b	60	1163	58.3	+39 8	8.6	8.6	Ao	2	..	38934i
11	981	57.9	-22 14	9.1	10.0	K2	2	..	17402b	61	828	58.3	+23 23	8.0	9.2	K5	2	0.2	38161i
12	1830	57.9	-44 58	8.72	8.9	A3	6	2,5	18482b	62	688	58.3	+16 59	8.8	9.8	Ko	4	..	4420m
13	622	57.9	-52 1	7.7	9.5	Ko	4	..	38400b	63	820	58.3	+14 24	10.5	10.5	A	1	..	4420m
14	395	57.9	-64 7	9.3	10.1	G5	2	..	38371b	64	821	58.3	+4 16	9.5	10.1	Go	2	..	14663b
15	301	57.9	-71 5	8.2	9.0	G5	7	..	20540b	65	985	58.3	-3 8	8.5	8.5	B9	5	..	17409b
16	959	58.0	+46 46	6.62	7.12	F8	4	..	2219b	66	1071	58.3	-6 46	8.7	9.2	F8	2	..	14664b
17	1058	58.0	+42 33	9.2	9.2	A	1	..	38088i	67	1014	58.3	-8 4	9.1	9.1	Ao	3	..	14664b
18	1050	58.0	+41 44	8.0	8.1	A2	6	0,6	38088i	68	1013	58.3	-8 48	6.78	6.78	Ao	8	..	14664b
19	1051	58.0	+41 9	8.9	8.9	Ao	2	..	38088i	69	1057	58.3	-9 24	9.6	9.6	Ao	4	..	24605b
20	840	58.0	+8 53	8.8	8.8	Ao	2	..	38410b	70	1058	58.3	-12 35	8.5	8.5	Ao	5	..	45972b
21	1076	58.0	-10 38	10.0	11.0	Ko	2	..	24605b	71	1022	58.3	-14 37	9.6	10.8	K5	2	..	24605b
22	1047	58.0	-11 46	9.8	9.9	A3	4	..	24605b	72	1912	58.3	-28 14	9.2	9.7	G5	3	..	20533b
23	927	58.0	-15 51	8.7	9.0	F2	3	..	12628b	73	1846	58.3	-37 59	8.8	9.4	F8	3	..	42101b
24	2064	58.0	-35 31	10.1	10.4	Go	2	..	46020b	74	1665	58.3	-46 5	8.4	8.8	Ao	7	..	38400b
25	1743	58.0	-39 5	8.1	9.4	Ko	4	..	42101b	75	450	58.3	-58 39	8.4	8.9	A5	4	..	42691b
26	1624	58.0	-47 45	7.7	9.2	K2	5	..	38400b	76	393	58.3	-63 35	9.6	10.4	G5	1	..	38371b
27	349	58.0	-66 25	9.3	10.1	G5	2	..	38367b	77	126	58.3	-81 17	9.5	10.1	G	2	..	20557b
28	879	58.1	+32 11	6.43	6.51	A3	7	0,8	38921i	78	850	58.4	+59 12	8.4	8.4	Ao	5	0.2	38907i
29	800	58.1	+29 29	8.0	8.0	Ao	4	..	38161i	79	741	58.4	+28 34	9.1	9.5	F5	3	..	38161i
30	729	58.1	+16 0	10.1	10.2	A2	4	..	4420m	80	723	58.4	+27 33	6.48	6.54	A2	6	..	36997i
31	750	58.1	+3 53	8.9	8.9	B8	4	..	38075i	81	754	58.4	+21 32	8.2	8.1	B5	4	R	38213i
32	1011	58.1	-8 21	8.1	8.1	B9	6	..	14664b	82	755	58.4	+21 9	6.34	7.34	Ko	6	0,4	38213i
33	1056	58.1	-12 3	9.2	9.3	A2	7	..	24605b	83	819	58.4	+6 30	7.59	8.59	Ko	4	..	38075i
34	928	58.1	-15 38	9.6	10.7	K2	1	..	24605b	84	849	58.4	+2 25	8.4	8.5	A3	2	..	38183i
35	981	58.1	-18 37	9.3	10.3	Ko	1	..	45972b	85	961	58.4	-7 26	8.7	9.7	Ko	2	..	14664b
36	1975	58.1	-26 25	5.01	6.7	Ko	..	..	56,121	86	1077	58.4	-10 37	10.9	11.9	Ko	1	..	24605b
37	1662	58.1	-46 34	9.3	10.0	F5	3	..	38400b	87	1027	58.4	-16 1	8.9	9.4	F8	2	..	45972b
38	1338	58.1	-51 12	8.6	9.5	Fo	4	..	38400b	88	1054	58.4	-21 15	8.1	8.5	F5	5	..	17402b
39	312	58.1	-69 9	9.3	10.3	Ko	1	..	38367b	89	2161	58.4	-31 30	7.21	8.5	Ko	8	..	24442b
40	290	58.1	-75 5	5.28	7.3	Ko	..	R	56,121	90	2102	58.4	-32 18	9.4	9.1	F2	5	..	24442b
41	97	58.2	+84 45	8.9	9.3	F5	4	..	38330i	91	1993	58.4	-37 7	7.52	8.1	Go	5	..	42101b
42	292	58.2	+71 25	8.2	8.2	B9	3	..	38112i	92	1601	58.4	-48 22	8.7	9.0	F8	5	..	38400b
43	849	58.2	+59 38	8.9	9.3	F5	2	..	38907i	93	396	58.4	-61 6	9.1	9.5	Ao	3	..	38371b
44	858	58.2	+55 0	8.46	8.54	A3	2	..	38970i	94	159	58.4	-78 18	8.3	8.6	Fo	6	..	15162b
45	859	58.2	+54 15	7.31	8.09	G5	3	..	14302i	95	160	58.4	-78 34	7.5	7.5	Ao	9	E	20557b
46	1088	58.2	+44 55	7.97	7.80	B3	4	..	38088i	96	364	58.5	+67 40	8.9	9.0	A2	2	2,1	38952i
47	775	58.2	+30 14	9.06	10.06	K	1	..	38161i	97	498	58.5	+64 11	8.9	9.5	Go	2	..	38907i
48	730	58.2	+15 30	10.5	10.5	A	1	..	4420m	98	915	58.5	+52 32	8.6	8.6	Ao	4	..	38970i
49	1052	58.2	-13 48	9.1	9.6	F8	5	..	24605b	99	1214	58.5	+48 31	7.9	7.9	Ao	6	1,3	38125i
50	1051	58.2	-21 24	8.3	9.7	K5	3	..	17402b	100	830	58.5	+23 31	8.6	9.6	Ko	3	5,3	38161i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

32500

4^h 58^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1023	58.5	-14 30	9.6	10.4	G5	3	..	24605b	51	785	58.9	+ 8 3	8.2	9.0	G5	2	..	38204i
2	1053	58.5	-21 34	9.3	9.7	F5	2	..	17402b	52	821	58.9	+ 6 23	9.3	9.4	A2	3	..	38410b
3	R	58.5	-22 57	5.84	6.9	Ko	9	5,10	42783b	53	1048	58.9	-11 5	10.5	11.0	F8	2	..	24605b
4	2162	58.5	-31 50	8.9	10.3	G5	1	..	46020b	54	1084	58.9	-19 16	9.3	9.8	F8	1	..	12628b
5	1994	58.5	-37 11	8.8	9.4	Go	3	..	42101b	55	986	58.9	-22 13	9.8	10.0	A5	1	..	17402b
6	1667	58.5	-46 10	10.6	9.7	A2	4	..	38400b	56	783	58.9	-53 9	8.5	9.8	Ko	3	..	39700b
7	721	58.5	-57 46	7.8	8.0	Ao	6	..	42691b	57	315	58.9	-69 13	9.2	9.8	Go	3	..	38367b
8	1301	58.6	+49 50	7.52	7.94	F5	5	0,2	38125i	58	165	59.0	+79 37	9.0	9.5	F8	2	..	37558i
9	780	58.6	+26 35	7.42	7.48	A2	6	..	38161i	59	499	59.0	+64 5	9.0	9.6	Go	1	..	38907i
10	822	58.6	+14 52	10.1	11.1	Ko	1	..	4420m	60	1036	59.0	+45 55	9.7	9.7	A	2	..	38940i
11	785	58.6	+13 12	9.5	9.6	A2	2	..	4420m	61	777	59.0	+18 7	7.7	7.8	A2	5	..	37567i
12	843	58.6	+ 8 52	8.8	10.0	K5	2	..	38410b	62	719	59.0	+12 34	8.5	8.5	Ao	2	..	38204i
13	782	58.6	+ 7 29	8.8	9.9	K2	1	..	38410b	63	786	59.0	+ 7 27	8.6	9.1	F8	2	..	38410b
14	2174	58.6	-25 15	9.5	9.8	F	1	..	20533b	64	835	59.0	- 0 48	8.2	9.0	G5	2	0,2	38183i
15	2163	58.6	-31 55	6.00	7.5	Ko	..	0,10	56,121	65	992	59.0	- 3 38	9.3	9.9	Go	2	..	14949b
16	1749	58.6	-39 14	8.5	8.3	A2	7	..	42101b	66	1080	59.0	-10 32	9.8	10.2	F5	3	..	24605b
17	1772	58.6	-44 59	7.98	8.8	G5	7	5,7	18482b	67	2179	59.0	-25 8	8.70	9.4	G5	2	..	20533b
18	302	58.7	+69 30	6.58	7.58	Ko	5	..	38112i	68	2020	59.0	-29 57	8.74	9.4	A2	4	..	24442b
19	850	58.7	+53 23	8.8	8.8	B9	4	..	38970i	69	2168	59.0	-30 59	8.9	10.1	G5	3	R	24442b
20	802	58.7	+29 50	7.91	8.91	Ko	3	..	38161i	70	2075	59.0	-33 17	9.1	9.1	F5	5	E	24442b
21	833	58.7	+23 47	8.6	9.6	Ko	3	0,2	38213i	71	339	59.0	-70 18	9.1	9.5	F5	4	..	20540b
22	823	58.7	+14 41	9.8	10.6	G5	1	..	4420m	72	1305	59.1	+49 48	8.2	8.3	A3	3	..	38125i
23	787	58.7	+13 50	9.3	9.3	Ao	4	..	4420m	73	1167	59.1	+39 27	8.7	8.7	Ao	4	..	37365i
24	847	58.7	+ 9 1	9.1	10.3	K5	1	..	38410b	74	972	59.1	+35 43	7.8	8.2	F5	6	3,6	37260i
25	784	58.7	+ 7 40	8.8	9.9	K2	2	..	38410b	75	837	59.1	+23 40	8.0	9.0	Ko	5	..	38213i
26	1111	58.7	- 2 41	6.85	7.85	Ko	6	0,5	14664b	76	825	59.1	+14 44	6.68	6.74	A2	7	1,7-	37544i
27	1025	58.7	- 4 21	8.7	9.0	Fo	2	..	17409b	77	787	59.1	+ 7 41	7.12	8.12	Ko	4	..	38075i
28	1138	58.7	- 5 18	8.9	8.9	Ao	3	..	14664b	78	800	59.1	+ 5 37	9.1	9.5	F5	2	..	14663b
29	1062	58.7	- 9 45	9.1	10.1	Ko	4	..	24605b	79	991	59.1	- 3 0	8.9	9.2	Fo	3	..	17409b
30	1978	58.7	-26 47	8.5	9.4	G5	4	..	20533b	80	1073	59.1	- 6 0	8.6	9.1	F8	2	..	17409b
31	1629	58.7	-47 15	8.9	10.0	Ko	3	..	38400b	81	1081	59.1	-10 43	10.0	11.0	Ko	2	..	24605b
32	395	58.7	-63 11	9.2	9.6	F5	2	..	38371b	82	1025	59.1	-14 46	8.51	8.79	Fo	6	..	12628b
33	350	58.7	-66 21	9.3	9.9	Go	2	..	38367b	83	984	59.1	-18 20	9.1	9.5	F5	2	..	12628b
34	351	58.7	-66 53	9.7	9.8	A5	3	..	38367b	84	1085	59.1	-19 39	8.6	8.5	Ao	7	..	17402b
35	855	58.8	+57 42	8.9	9.0	A3	2	..	38136i	85	988	59.1	-22 29	9.6	10.0	Go	2	..	17402b
36	917	58.8	+52 50	9.0	9.0	Ao	2	..	38970i	86	2112	59.1	-32 11	9.5	9.4	F5	4	..	24442b
37	1024	58.8	+51 29	4.99	5.27	Fo	..	0,10	56,79	87	1700	59.1	-40 14	9.1	10.1	Ko	2	..	42101b
38	1216	58.8	+48 27	8.6	8.6	B9	3	..	38125i	88	1777	59.1	-45 45	7.7	8.5	Ao	8	2,8	38400b
39	943	58.8	+34 44	8.6	8.7	A5	4	..	37365i	89	1530	59.1	-49 12	9.5	10.1	G5	3	..	38400b
40	942	58.8	+34 8	8.6	8.9	Fo	4	..	37365i	90	752	59.1	-54 9	8.1	8.8	F5	6	..	39700b
41	852	58.8	+ 2 49	8.6	8.6	Ao	3	..	46195b	91	177	59.2	+81 49	9.5	9.8	F	3	..	37558i
42	2160	58.8	-30 18	9.2	10.0	Ko	2	..	24442b	92	691	59.2	+17 1	8.9	9.0	A3	6	0,2	4420m
43	1527	58.8	-49 31	10.6	10.7	Go	2	..	38400b	93	733	59.2	+15 50	9.1	9.2	A3	4	..	4420m
44	1528	58.8	-49 43	8.24	9.6	Ko	4	..	38400b	94	826	59.2	+14 24	9.8	10.6	G5	2	..	4420m
45	762	58.8	-56 33	8.7	9.7	F5	2	..	42691b	95	790	59.2	+13 10	7.5	7.5	B8	5	1,9	37567i
46	376	58.8	-67 15	9.4	10.2	G5	2	..	38367b	96	756	59.2	+ 3 54	8.8	9.2	F5	2	..	14663b
47	807	58.9	+58 27	8.5	9.3	G5	3	..	14302i	97	933	59.2	+ 0 57	8.89	9.67	G5	1	..	38183i
48	1164	58.9	+42 42	8.5	9.5	Ko	2	..	38088i	98	993	59.2	- 3 33	8.7	9.5	G5	2	5,1	14949b
49	732	58.9	+15 16	4.65	4.63	B9	..	4, R	56,79	99	1050	59.2	-11 40	8.9	9.2	Fo	7	..	24605b
50	789	58.9	+13 49	9.1	9.1	Ao	5	..	4420m	100	1049	59.2	-11 48	8.9	9.7	G5	8	..	24605b

THE HENRY DRAPER CATALOGUE.

32600

4^h 59^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1061	59.2	-12 28	10.0	11.2	K5	1	..	24605b	51	456	59.7	+65 52	8.0	9.0	Ko	3	..	36654i
2	931	59.2	-15 51	8.1	8.5	F5	7	..	12628b	52	862	59.7	+54 52	7.86	7.84	B9	4	..	14302i
3	997	59.2	-20 37	9.2	9.5	Ao	3	..	17402b	53	1122	59.7	+50 9	7.37	7.35	B9	7	1,4	38125i
4	631	59.2	-52 12	8.9	9.5	A3	3	..	39700b	54	1306	59.7	+49 56	8.42	8.42	Ao	3	..	38125i
5	406	59.2	-62 26	8.7	9.3	Go	3	..	38371b	55	1170	59.7	+43 2	6.21	6.55	F2	5	0,9	2219b
6	958	59.3	+55 24	7.46	7.96	F8	4	..	14302i	56	783	59.7	+26 17	6.56	6.44	B5	7	..	38161i
7	1121	59.3	+50 25	9.4	9.5	A2	3	..	38125i	57	792	59.7	+13 43	8.8	9.3	F8	2	..	4420m
8	973	59.3	+35 48	6.37	6.45	A3	8	0,8	37365i	58	793	59.7	+13 40	9.1	9.7	Go	3	..	4420m
9	789	59.3	+7 39	9.1	10.2	K2	2	..	38410b	59	723	59.7	+12 52	8.2	8.2	Ao	2	..	37567i
10	1083	59.3	-10 47	7.41	8.41	Ko	9	..	24605b	60	852	59.7	+8 49	7.39	7.37	B9	6	..	38075i
11	1062	59.3	-12 19	9.3	9.9	Go	7	..	24605b	61	827	59.7	+6 5	8.6	8.7	A3	5	..	38410b
12	1027	59.3	-14 31	6.35	6.18	B3	7	..	20232b	62	803	59.7	+6 0	7.6	8.2	Go	7	2,4	38410b
13	1029	59.3	-14 42	6.90	7.97	K2	3	..	20232b	63	854	59.7	+2 31	8.2	8.2	Ao	5	..	46195b
14	934	59.3	-15 6	9.6	10.2	Go	2	..	24605b	64	1086	59.7	-10 41	8.8	9.9	K2	4	..	24605b
15	933	59.3	-15 50	9.6	10.2	Go	2	..	24605b	65	1063	59.7	-12 8	10.0	10.6	Go	2	..	24605b
16	1532	59.3	-49 46	10.1	9.8	A3	3	..	38400b	66	936	59.7	-15 38	10.2	11.0	G5	1	..	24605b
17	1603	59.3	-50 25	9.0	10.7	K5	2	..	38400b	67	2795	59.7	-24 32	5.55	5.61	A2	..	..	56,79
18	1095	59.4	+47 51	9.2	9.3	A2	3	..	38125i	68	2027	59.7	-29 6	9.7	10.0	G5	1	..	20533b
19	1091	59.4	+44 36	7.32	7.40	A3	7	0,3	38088i	69	1536	59.7	-49 9	10.6	10.1	F2	2	..	38400b
20	692	59.4	+16 29	9.1	9.2	A2	6	2,2	4420m	70	396	59.7	-63 47	9.1	10.2	K2	2	..	38371b
21	1117	59.4	-2 49	9.1	9.4	Fo	2	..	14949b	71	75	59.8	+85 37	8.6	9.4	G5	3	..	37546i
22	1075	59.4	-6 10	6.72	6.70	B9	7	..	17409b	72	1020	59.8	+38 23	7.7	7.5	B3	6	..	37365i
23	1056	59.4	-13 40	9.6	10.6	Ko	3	..	24605b	73	976	59.8	+35 26	7.67	8.23	Go	3	..	38934i
24	2024	59.4	-29 4	9.2	9.7	F8	3	..	20533b	74	1052	59.8	-11 6	10.5	10.9	F5	1	..	24605b
25	2167	59.4	-30 39	8.9	10.8	G5	2	..	24442b	75	1058	59.8	-13 51	8.5	9.3	G5	8	..	24605b
26	1652	59.4	-43 39	8.9	10.0	Ao	2	..	42090b	76	1032	59.8	-14 13	10.0	10.6	Go	2	..	24605b
27	1609	59.4	-48 21	10.1	10.7	Go	1	..	38400b	77	1989	59.8	-26 2	8.0	9.1	Ko	5	..	20533b
28	399	59.4	-61 49	8.8	9.5	G5	4	..	38371b	78	1681	59.8	-41 45	7.9	9.4	K2	3	..	42090b
29	959	59.5	+55 37	7.11	8.11	Ko	3	..	14302i	79	1610	59.8	-48 43	9.5	10.7	G5	2	..	38400b
30	1058	59.5	+41 6	3.28	3.11	B3	..	R	2491c	80	760	59.9	+61 33	9.2	9.3	A2	3	..	38907i
31	1171	59.5	+40 29	8.0	8.4	F5	4	..	37365i	81	853	59.9	+53 5	8.0	9.1	K2	2	..	38970i
32	1169	59.5	+39 54	7.82	7.82	Ao	6	..	37365i	82	977	59.9	+35 22	8.1	8.1	Ao	3	..	38934i
33	953	59.5	+33 47	6.94	6.89	B8	6	..	37365i	83	946	59.9	+34 43	8.1	9.5	Ma	4	..	37365i
34	758	59.5	+3 26	8.4	9.2	G5	2	..	38075i	84	806	59.9	+29 38	8.0	8.3	Fo	4	2,4	38921i
35	1672	59.5	-46 40	8.7	9.4	F5	5	..	38400b	85	793	59.9	+7 26	8.0	8.0	B9	5	..	38075i
36	727	59.5	-54 58	9.18	10.4	K2	1	..	39700b	86	998	59.9	-3 11	5.98	5.86	B5	8	2,10	38183i
37	367	59.6	+68 8	9.0	10.0	Ko	1	..	38112i	87	1067	59.9	-9 32	9.8	10.6	G5	3	..	24605b
38	759	59.6	+62 4	8.5	9.7	K5	2	..	38136i	88	1068	59.9	-9 51	10.0	11.0	K	1	..	24605b
39	1040	59.6	+37 4	8.6	9.4	G5	4	..	37365i	89	1053	59.9	-11 19	9.6	10.6	Ko	3	..	24605b
40	1000	59.6	+36 24	8.6	8.7	A2	2	2,4	38934i	90	1935	59.9	-28 38	9.9	9.8	G5	1	..	20533b
41	818	59.6	+22 56	6.66	6.54	B5	6	..	37388i	91	2123	59.9	-32 7	10.1	10.5	G5	1	..	24442b
42	847	59.6	+19 40	6.46	6.52	A2	5	1,8	37388i	92	2032	59.9	-33 58	10.1	10.6	Go	2	..	46020b
43	735	59.6	+15 7	7.74	7.74	Ao	5	0,7	37567i	93	1736	59.9	-42 38	7.0	8.2	Ma	6	..	42090b
44	721	59.6	+12 39	8.25	8.31	A2	3	..	38167i	94	1841	59.9	-44 58	8.48	9.4	Ko	5	0,4	42090b
45	1019	59.6	-8 22	8.7	9.0	Fo	3	..	14664b	95	1605	59.9	-50 29	8.5	9.2	F5	5	..	38400b
46	1085	59.6	-10 17	9.8	10.6	G5	3	..	24605b	96	294	0.0	+71 32	8.8	10.0	K5	1	..	38112i
47	1057	59.6	-13 21	9.3	9.6	F2	4	..	24605b	97	962	0.0	+46 21	8.7	8.7	Ao	3	..	38940i
48	1030	59.6	-13 58	9.1	10.3	K5	4	..	24605b	98	877	0.0	+20 34	10.0	10.1	A5	1	..	38213i
49	1031	59.6	-14 16	9.8	10.1	F2	3	..	24605b	99	736	0.0	+16 4	9.4	10.2	G5	2	..	4420m
50	274	59.7	+73 49	5.38	5.38	Aop	..	R	56,79	100	796	0.0	+13 49	9.4	10.4	Ko	1	..	4420m

ANNALS OF HARVARD COLLEGE OBSERVATORY.

32700

5^h 0^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	..	m. 0.0	° 10 34	Neb.	Neb.	Pd	1	R	38167i	51	1042	m. 0.3	° 45 7	8.62	8.96	F2	3	..	38088i
2	794	0.0	+ 7 49	8.3	9.3	Ko	5	..	38410b	52	1061	0.3	+ 41 58	8.2	8.2	Ao	4	..	38088i
3	759	0.0	+ 3 6	8.7	9.1	F5	3	..	14663b	53	796	0.3	+ 8 2	8.5	8.5	B9	2	..	38204i
4	1032	0.0	- 4 4	9.1	9.9	G5	3	5,2	14949b	54	828	0.3	+ 6 9	8.5	9.1	Go	3	..	38410i
5	1021	0.0	- 8 30	9.2	9.2	Ao	3	..	14664b	55	1023	0.3	- 8 42	8.5	8.5	Ao	5	..	14664b
6	1059	0.0	- 13 4	7.24	7.32	A3	3	..	20232b	56	1057	0.3	- 11 7	9.2	9.8	Go	6	..	24605b
7	938	0.0	- 15 5	7.50	8.68	K5	5	..	12628b	57	1033	0.3	- 14 15	9.2	10.2	Ko	3	..	24605b
8	2045	0.0	- 27 48	8.2	9.8	K5	3	..	20533b	58	991	0.3	- 18 5	8.5	9.3	G5	2	..	45972b
9	1684	0.0	- 41 30	10.0	10.1	G	2	..	20648b	59	1993	0.3	- 26 11	9.8	10.0	Ko	1	..	20533b
10	1685	0.0	- 41 52	9.4	9.7	A2	3	..	42090b	60	1543	0.3	- 49 51	7.34	8.4	Ko	6	..	38400b
11	1606	0.0	- 50 36	7.9	8.2	A3	7	..	38400b	61	1607	0.3	- 50 56	7.8	8.6	F5	6	..	38400b
12	452	0.0	- 58 40	8.4	9.2	K2	2	..	42691b	62	300	0.3	- 68 44	8.3	8.4	A2	7	..	20540b
13	366	0.0	- 60 48	9.1	10.1	K5	1	..	38371b	63	343	0.3	- 70 20	..	10.4	Pec.	..	R	M
14	397	0.0	- 64 32	8.1	9.1	Ko	7	..	38371b	64	178	0.4	+ 81 6	8.8	9.6	G5	3	..	37558i
15	500	0.1	+ 64 47	6.40	6.74	F2	9	..	36654i	65	258	0.4	+ 72 37	7.9	7.9	B9	6	E	37343i
16	1123	0.1	+ 51 0	9.5	9.5	Ao	2	..	38125i	66	369	0.4	+ 68 23	8.6	8.7	A2	2	..	38112i
17	854	0.1	+ 8 20	8.3	8.3	Ao	4	..	38167i	67	1005	0.4	+ 56 35	8.6	9.6	Ko	1	..	38970i
18	795	0.1	+ 7 33	8.8	9.8	Ko	2	..	38410b	68	1186	0.4	+ 43 18	8.7	8.7	B9	3	..	38088i
19	829	0.1	+ 4 27	8.5	8.5	Ao	4	..	38075i	69	956	0.4	+ 33 17	8.4	8.5	A3	2	..	37365i
20	796	0.1	- 1 26	8.3	8.3	B9	5	..	14949b	70	762	0.4	+ 4 2	8.7	9.5	G5	1	..	14663b
21	999	0.1	- 3 49	8.6	8.7	A2	3	..	17409b	71	940	0.4	+ 0 12	8.68	9.68	Ko	1	..	38183i
22	1022	0.1	- 8 26	9.0	9.6	Go	3	..	14664b	72	1025	0.4	- 8 26	9.2	9.5	Fo	3	..	14664b
23	1087	0.1	- 10 40	8.6	9.4	G5	6	..	24605b	73	1035	0.4	- 14 21	8.0	9.0	Ko	8	5,1	24605b
24	1054	0.1	- 11 50	7.8	8.4	Go	8	..	24605b	74	1034	0.4	- 16 8	8.8	9.8	Ko	2	..	39704b
25	1090	0.1	- 19 1	9.2	9.5	Fo	2	..	12628b	75	1018	0.4	- 17 48	9.2	9.8	Go	1	..	45972b
26	1061	0.1	- 21 16	8.6	8.8	Ko	4	..	17402b	76	1065	0.4	- 21 22	7.62	8.5	Ko	6	..	17402b
27	2028	0.1	- 29 57	8.59	9.7	K2	3	..	24442b	77	1648	0.4	- 47 54	9.7	10.0	Go	2	..	38400b
28	1738	0.1	- 42 7	9.3	9.7	Go	2	..	42090b	78	767	0.4	- 56 15	6.9	8.2	Go	6	..	42691b
29	1348	0.1	- 51 36	8.3	9.2	G5	4	..	38400b	79	319	0.4	- 69 2	9.5	10.3	G5	2	..	38367b
30	368	0.2	+ 68 32	8.9	10.3	Ma	1	..	38112i	80	340	0.4	- 72 16	8.8	9.8	Ko	1	..	20540b
31	761	0.2	+ 61 24	9.2	9.2	Ao	2	..	38136i	81	190	0.5	+ 76 21	6.31	6.29	B9	10	..	37558i
32	851	0.2	+ 59 44	9.5	9.5	Ao	1	..	38907i	82	295	0.5	+ 71 26	9.2	9.8	Go	1	..	38112i
33	948	0.2	+ 34 24	7.8	8.2	F5	4	..	37365i	83	304	0.5	+ 70 0	8.49	8.49	Ao	3	..	38112i
34	797	0.2	+ 13 10	7.7	8.7	Ko	7	0,3	4420m	84	730	0.5	+ 62 21	6.74	6.88	A5	9	3,7-	38907i
35	707	0.2	+ 10 30	9.0	10.0	Ko	1	..	38167i	85	981	0.5	+ 35 37	9.4	9.4	Ao	2	..	37365i
36	939	0.2	+ 1 2	var.	var.	Nb	3	R	38183i	86	739	0.5	+ 16 2	10.0	11.0	Ko	1	..	4420m
37	1081	0.2	- 6 40	8.5	9.3	G5	2	..	14664b	87	708	0.5	+ 10 12	8.97	8.97	Ao	2	..	38167i
38	1034	0.2	- 14 38	9.5	10.1	Go	3	..	24605b	88	1068	0.5	- 12 28	8.7	9.0	F2	8	..	24605b
39	990	0.2	- 18 1	7.73	7.81	A3	8	..	12628b	89	1003	0.5	- 20 23	7.30	8.2	G5	8	..	17402b
40	1002	0.2	- 20 28	8.2	9.7	K2	4	..	17402b	90	1764	0.5	- 39 24	9.0	9.8	Ko	1	..	42101b
41	2126	0.2	- 32 5	10.0	10.5	Fo	2	..	24442b	91	1545	0.5	- 49 47	9.9	10.1	G5	2	..	38400b
42	1790	0.2	- 45 41	10.1	10.0	F8	2	..	18482b	92	401	0.5	- 61 56	9.0	10.3	F8	2	..	38371b
43	1541	0.2	- 49 18	5.44	6.1	F5	..	R	28,197	93	410	0.5	- 62 14	8.9	9.5	Go	3	..	38371b
44	353	0.2	- 66 10	9.7	10.5	G5	1	..	32367b	94	400	0.5	- 63 13	9.1	9.5	F5	4	..	38371b
45	565	0.3	+ 63 41	8.0	8.6	Go	4	0,2	38907i	95	365	0.6	+ 67 29	9.4	9.5	A3	2	..	38112i
46	811	0.3	+ 58 32	8.9	9.7	G5	1	..	38970i	96	1222	0.6	+ 48 28	8.6	8.7	A5	3	..	38125i
47	857	0.3	+ 57 18	7.8	7.8	B9	6	0,4	38970i	97	1174	0.6	+ 40 1	8.97	9.03	A2	4	..	37365i
48	961	0.3	+ 55 58	8.0	8.0	Ao	2	..	14302i	98	1024	0.6	+ 38 42	9.4	9.5	A2	4	..	37365i
49	1125	0.3	+ 50 30	9.2	9.3	A2	2	..	38125i	99	1025	0.6	+ 38 42	9.4	9.5	A2	4	..	37365i
50	1098	0.3	+ 47 40	9.2	9.2	Ao	3	..	38125i	100	1004	0.6	+ 36 44	9.0	9.1	A3	4	..	37365i

THE HENRY DRAPER CATALOGUE.

32800

5^h 0^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	695	0.6	+16 6	10.4	11.2	G5	1	..	4420m	51	803	1.0	+13 57	7.42	7.92	F8	5	0,8	37567i
2	740	0.6	+15 59	9.7	10.9	K5	1	..	4420m	52	727	1.0	+12 35	8.80	9.08	F	2	E	38167i
3	995	0.6	-22 2	var.	var.	Md	..	R	M	53	712	1.0	+10 29	8.1	8.1	B9	5	..	38167i
4	1710	0.6	-40 45	8.7	9.4	Go	5	..	42101b	54	1038	1.0	-16 1	9.2	9.5	F	2	..	39704b
5	1793	0.6	-45 58	8.7	10.0	G5	4	..	38400b	55	1067	1.0	-21 24	7.6	7.9	A0	9	..	17402b
6	1547	0.6	-49 38	7.18	8.2	K0	7	..	38400b	56	2185	1.0	-31 44	8.8	10.0	Go	2	..	24442b
7	457	0.7	+65 31	8.9	9.9	K0	1	..	38952i	57	1795	1.0	-45 21	8.0	8.8	A3	7	1,8	42090b
8	962	0.7	+55 48	9.0	9.3	F2	2	..	38970i	58	320	1.0	-69 30	8.7	8.7	A0	6	..	20540b
9	1127	0.7	+50 39	9.7	9.7	A	1	..	38125i	59	161	1.0	-78 47	8.4	9.2	K0	3	2,3	14359b
10	809	0.7	+29 56	8.66	8.72	A2	3	2,3	37525i	60	102	1.0	-82 11	9.6	10.2	G	2	..	20557b
11	825	0.7	+22 24	7.01	6.99	B9	5	..	37388i	61	1176	1.1	+42 46	8.5	8.5	B8	3	..	38088i
12	799	0.7	+13 42	9.4	10.6	K5	1	..	4420m	62	986	1.1	+35 7	9.07	9.63	Go	1	..	38934i
13	832	0.7	+6 21	10.0	10.1	A3	1	..	38410b	63	892	1.1	+32 37	7.50	8.50	K0	2	..	37365i
14	806	0.7	+5 58	9.7	10.5	G5	1	..	38410b	64	829	1.1	+22 17	8.8	9.2	F5	2	..	37388i
15	805	0.7	+5 31	8.5	9.7	K5	1	..	14663b	65	804	1.1	+13 30	8.1	9.1	K0	5	5,2	4420m
16	896	0.7	+1 44	8.3	8.3	A0	6	..	14663b	66	859	1.1	+2 50	9.0	9.5	F8	2	..	14663b
17	1003	0.7	-3 14	8.8	9.3	F8	4	..	14949b	67	860	1.1	+2 33	8.1	8.1	B8	5	E	37594i
18	1090	0.7	-9 58	8.31	8.31	A0	8	..	24605b	68	800	1.1	-1 22	7.7	8.5	G5	2	..	17409b
19	2129	0.7	-32 14	9.4	10.8	G5	1	..	24442b	69	1009	1.1	-3 13	9.5	9.6	A2	3	..	14949b
20	1690	0.7	-41 53	6.31	6.7	F8	10	..	42090b	70	1092	1.1	-10 2	10.4	11.0	Go	2	..	24605b
21	1609	0.7	-50 28	7.4	8.7	F0	7	..	38400b	71	2202	1.1	-25 19	9.6	9.1	F0	5	..	20533b
22	760	0.7	-54 46	9.2	10.3	K2	2	..	39700b	72	2205	1.1	-25 52	10.3	9.8	F8	1	..	20533b
23	730	0.7	-55 49	8.8	10.3	K0	1	..	39700b	73	2017	1.1	-37 31	10.0	10.1	Go	2	..	42101b
24	305	0.7	-71 0	9.7	9.8	A5	2	..	20540b	74	1861	1.1	-38 41	8.7	9.4	Go	3	..	42101b
25	53	0.7	-86 31	8.2	8.5	F0	5	..	15145b	75	1712	1.1	-40 42	9.3	9.8	F5	4	..	42101b
26	1065	0.8	+41 53	8.9	9.2	F0	2	..	38088i	76	1681	1.1	-46 27	9.3	10.0	A3	3	..	38400b
27	1046	0.8	+37 30	8.2	8.3	A2	4	..	37365i	77	412	1.1	-62 16	9.6	10.7	K2	1	..	38371b
28	750	0.8	+24 15	9.0	9.0	A0	3	2,2	38213i	78	790	1.2	+30 30	9.4	9.4	A	3	..	37525i
29	711	0.8	+10 10	8.57	9.35	G5	2	..	38167i	79	697	1.2	+16 41	8.1	8.6	F8	6	3,3	4420m
30	2389	0.8	-23 36	8.8	9.1	K0	3	..	17402b	80	741	1.2	+15 59	8.4	8.5	A5	6	..	4420m
31	2089	0.8	-35 37	4.62	6.2	K0	..	R	28,197	81	713	1.2	+10 33	7.8	8.8	K0	2	..	38167i
32	761	0.8	-54 14	9.1	10.4	K5	2	..	39700b	82	807	1.2	+5 20	9.0	9.0	A0	2	..	14663b
33	854	0.9	+53 43	8.6	9.6	K0	2	5,1	38970i	83	768	1.2	+3 54	9.0	9.4	F5	3	..	14663b
34	1175	0.9	+39 49	8.27	9.34	K2	1	..	38088i	84	1010	1.2	-3 37	8.0	8.0	B9	5	..	17409b
35	787	0.9	+26 52	8.4	8.4	A	3	R	38161i	85	1093	1.2	-10 15	9.0	9.1	A2	6	..	24605b
36	830	0.9	+14 52	10.4	11.4	K0	1	..	4420m	86	1039	1.2	-14 55	8.26	9.26	K0	3	..	12628b
37	833	0.9	+6 55	8.4	9.5	K2	3	..	38410b	87	1000	1.2	-22 30	3.29	4.47	K5	..	R	28,197
38	767	0.9	+3 40	7.6	8.6	K0	6	..	14663b	88	2392	1.2	-23 48	8.4	9.1	K5	4	..	17402b
39	799	0.9	-1 57	8.50	9.28	G5	3	5,2 R	14949b	89	2206	1.2	-25 39	7.9	9.2	G5	3	..	20533b
40	970	0.9	-6 56	8.5	9.5	K	1	R	14664b	90	2005	1.2	-26 17	5.89	7.4	K0	..	0,10	56,121
41	1074	0.9	-9 34	8.4	8.8	F5	7	..	24605b	91	1656	1.2	-47 44	9.5	9.7	A3	4	..	38400b
42	1091	0.9	-10 40	9.9	9.9	A0	3	..	24605b	92	637	1.2	-52 51	8.7	9.5	K0	3	..	39700b
43	2183	0.9	-31 53	8.2	9.7	G5	3	..	24442b	93	566	1.3	+63 27	6.66	6.94	F0	8	..	36654i
44	2093	0.9	-33 2	9.4	10.3	F5	3	..	24442b	94	1051	1.3	+37 52	9.0	9.1	A5	4	..	37365i
45	2090	0.9	-35 51	6.26	7.1	F0	..	..	28,197	95	832	1.3	+14 22	8.1	9.1	K0	5	5,2	4420m
46	731	0.9	-55 56	9.0	9.8	Go	2	..	39700b	96	802	1.3	+7 58	8.7	9.9	K5	3	..	38410b
47	409	0.9	-65 42	9.0	9.5	F8	4	..	38371b	97	834	1.3	+6 37	9.7	9.8	A3	1	..	38410b
48	1176	1.0	+39 43	8.0	8.0	B9	3	1,6	38088i	98	1094	1.3	-10 26	9.7	9.8	A2	4	..	24605b
49	831	1.0	+14 20	7.3	8.1	G5	4	5,7	37567i	99	1060	1.3	-11 38	9.0	9.3	F0	5	..	24605b
50										100	1070	1.3	-12 26	10.4	10.7	F0	3	..	24605b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

32900

5^h 1^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1068	m. 1.3	° 21 33	8.7	9.4	Ko	3	..	17402b	51	945	m. 1.7	° 0 32	8.4	9.2	G5	2	..	38183i
2	2396	1.3	-23 26	8.8	8.6	F8	5	..	17402b	52	1042	1.7	-4 38	8.4	9.6	K5	2	0,2 R	14664b
3	1226	1.4	+49 0	6.63	6.71	A3	5	0,5-	2219b	53	1063	1.7	-11 47	9.0	9.5	F8	6	..	24605b
4	1180	1.4	+39 36	8.0	9.1	K2	4	..	37365i	54	1021	1.7	-17 34	9.2	9.8	Go	2	..	45972b
5	987	1.4	+36 0	9.0	9.3	Fo	2	..	37365i	55	369	1.7	-60 49	9.2	9.5	F2	2	..	38371b
6	742	1.4	+15 48	7.5	8.6	K2	7	7,3 R	4420m	56	350	1.7	-70 46	8.1	8.4	Fo	8	..	20540b
7	806	1.4	+13 44	8.5	8.6	A2	3	..	4420m	57	459	1.8	+65 53	8.6	8.6	Ao	5	1,3	38907i
8	716	1.4	+11 42	8.7	8.8	A2	3	..	38167i	58	1008	1.8	+56 44	8.1	9.2	K2	1	..	38970i
9	835	1.4	+6 17	8.2	8.8	Go	3	E	38075i	59	1007	1.8	+56 35	8.0	9.1	K2	1	..	38970i
10	944	1.4	+0 25	9.4	10.8	Mc	..	..	M	60	1104	1.8	+44 30	9.0	9.1	A2	2	..	38088i
11	1011	1.4	-3 31	8.8	9.1	Fo	2	..	17409b	61	1075	1.8	+41 37	8.6	8.6	B9	3	..	38088i
12	1095	1.4	-10 2	9.46	9.96	F8	4	..	24605b	62	750	1.8	+28 15	8.4	8.7	F2	3	0,1	37525i
13	1096	1.4	-10 33	7.9	8.3	F5	10	..	24605b	63	789	1.8	+26 12	8.0	8.8	G5	4	..	38161i
14	1061	1.4	-11 21	10.4	10.8	F5	2	..	24605b	64	1044	1.8	-4 47	5.19	5.17	B9	..	1,10	2224c
15	1040	1.4	-14 3	8.0	8.8	G5	8	..	24605b	65	1064	1.8	-11 10	9.2	10.4	K5	2	..	24605b
16	1002	1.4	-22 39	8.8	8.8	F2	5	..	17402b	66	1045	1.8	-14 50	6.99	6.97	B9	4	..	20232b
17	2007	1.4	-26 16	9.6	9.8	A2	2	..	20533b	67	1071	1.8	-21 1	8.6	9.4	Ko	3	..	17402b
18	292	1.4	-75 25	8.5	9.5	Ko	3	..	15162b	68	2064	1.8	-27 39	8.4	9.7	F8	2	..	20533b
19	212	1.5	+75 36	8.57	8.99	F5	2	..	37558i	69	2106	1.8	-33 56	10.4	10.8	G5	1	..	46020b
20	296	1.5	+71 18	9.4	9.8	F5	1	..	38112i	70	1848	1.8	-44 18	8.4	10.0	K2	2	2,2	18482b
21	1033	1.5	+38 31	8.5	8.6	A2	4	..	37365i	71	1556	1.8	-49 45	7.74	8.7	A5	6	..	38400b
22	753	1.5	+24 41	9.4	9.9	F8	2	3,2-	37388i	72	304	1.8	-68 10	8.2	9.6	Ma	4	0,4	38367b
23	779	1.5	+18 30	5.04	5.60	Go	10	R	38213i	73	1010	1.9	+56 57	8.0	8.0	B9	3	0,3	14302i
24	861	1.5	+2 13	9.0	10.0	Ko	2	..	14663b	74	865	1.9	+54 25	9.9	9.9	Ao	2	..	38970i
25	1086	1.5	-6 27	9.0	9.1	A2	2	..	14664b	75	1227	1.9	+48 16	8.4	8.4	Ao	5	..	38125i
26	1097	1.5	-10 34	9.9	10.0	A2	3	..	24605b	76	794	1.9	+31 3	8.6	8.7	A3	3	1,2	37525i
27	1003	1.5	-22 48	9.5	9.8	F5	2	..	17402b	77	885	1.9	+20 17	5.29	5.37	A3	..	1,8 R	56,79
28	2188	1.5	-31 20	8.1	8.8	A2	6	..	24442b	78	746	1.9	+15 50	10.0	10.6	Go	2	..	4420m
29	1778	1.5	-39 41	7.61	8.8	Ko	5	..	42101b	79	833	1.9	+14 5	8.8	8.9	A2	6	..	4420m
30	1715	1.5	-40 16	9.3	10.1	K2	2	..	42101b	80	1078	1.9	-9 45	9.9	10.3	F5	4	..	24605b
31	1798	1.5	-45 5	9.32	10.0	K2	1	2,1	18482b	81	1042	1.9	-15 57	9.2	9.8	Go	3	5,3-	45972b
32	414	1.5	-62 3	9.4	9.5	A5	4	..	38371b	82	1007	1.9	-22 51	9.0	9.8	K2	3	..	17402b
33	380	1.5	-67 35	9.0	9.5	F8	4	..	38367b	83	1870	1.9	-38 28	9.4	9.8	F8	1	..	42101b
34	285	1.5	-73 13	8.8	9.8	Ko	1	..	20540b	84	1851	1.9	-44 35	9.2	10.0	A3	2	..	18482b
35	340	1.6	+70 50	8.4	9.4	Ko	3	..	38112i	85	456	1.9	-58 35	8.2	8.3	Fo	5	..	42691b
36	1179	1.6	+43 0	8.6	9.0	F5	2	..	38088i	86	417	1.9	-62 27	10.0	11.0	K	1	..	38371b
37	1183	1.6	+39 44	8.0	8.0	Ao	6	..	37365i	87	417	1.9	-65 3	9.36	9.7	F8	4	..	38371b
38	991	1.6	+36 1	9.5	9.8	Fo	2	..	37365i	88	928	2.0	+52 11	8.6	8.7	A2	3	..	38970i
39	806	1.6	+7 34	9.0	9.0	Ao	5	..	38410b	89	1191	2.0	+39 22	8.0	7.9	B5	6	..	37365i
40	974	1.6	-7 52	8.6	8.6	Ao	3	..	14664b	90	755	2.0	+24 8	5.50	5.33	B3	..	0,10	56,79
41	1076	1.6	-9 49	9.01	9.51	F8	5	..	24605b	91	766	2.0	+21 34	5.95	5.78	B3p	6	0,8 R	37388i
42	1062	1.6	-11 20	10.4	11.0	G	1	..	24605b	92	834	2.0	+14 14	8.2	8.2	Ao	4	0,8	37567i
43	1062	1.6	-13 47	8.4	8.9	F8	7	..	24605b	93	846	2.0	-0 2	8.43	8.77	F2	4	0,4-	12391b
44	944	1.6	-15 35	9.0	10.0	Ko	2	..	39704b	94	1156	2.0	-5 18	7.18	7.60	F5	5	..	17409b
45	1070	1.6	-21 17	8.6	8.9	Fo	4	..	17402b	95	1066	2.0	-11 14	9.9	10.9	Ko	1	..	24605b
46	1716	1.6	-40 43	8.5	8.8	Go	5	..	42101b	96	1063	2.0	-13 15	6.06	6.06	Ao	9	..	20232b
47	771	1.6	-56 18	8.6	9.2	A5	3	..	42691b	97	1022	2.0	-16 57	9.2	9.8	Go	2	..	45972b
48	1196	1.7	+44 0	8.0	8.8	G5	4	..	38088i	98	2065	2.0	-27 43	8.6	9.1	Ao	5	..	20533b
49	1053	1.7	+37 47	8.2	8.7	F8	4	..	37365i	99	2138	2.0	-32 45	9.3	9.7	Ko	4	..	24442b
50	732	1.7	+9 21	9.0	9.0	Ao	4	0,2	38410b	100	773	2.0	-56 27	7.8	8.5	Fo	6	..	42691b

THE HENRY DRAPER CATALOGUE.

33000

5^h 2^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	367	2.1	+67 33	7.28	7.62	F2	6	..	36654i	51	1182	2.5	+43 1	8.9	8.9	B9	2	..	3894oi
2	858	2.1	+53 35	8.1	8.1	B9	5	..	14302i	52	1082	2.5	+41 34	9.0	9.1	A2	2	..	38088i
3	992	2.1	+35 56	9.1	9.1	Ao	2	..	37365i	53	836	2.5	+14 25	7.7	8.5	G5	7	0,2	4420m
4	796	2.1	+30 19	9.0	9.0	Ao	3	..	37525i	54	866	2.5	+ 8 22	5.47	5.75	Fop	..	R	56,79
5	699	2.1	+16 17	8.7	9.2	F8	5	3,3	4420m	55	867	2.5	+ 8 15	9.0	10.1	K2	3	..	3841ob
6	732	2.1	+12 25	8.09	8.51	F5	4	..	38167i	56	1017	2.5	- 3 26	9.2	9.2	B9	2	..	17409b
7	865	2.1	+ 2 19	9.2	9.2	Ao	6	..	14663b	57	2421	2.5	-23 16	9.8	10.0	K2	1	..	17402b
8	946	2.1	+ 0 52	8.1	8.5	F5	4	E	37594i	58	1785	2.5	-39 31	9.4	9.2	F5	3	..	42101b
9	1099	2.1	- 9 59	8.46	8.74	Fo	7	..	24605b	59	405	2.5	-63 21	8.6	9.7	K2	3	..	38371b
10	1046	2.1	-14 35	9.0	9.0	Ao	6	..	24605b	60	402	2.5	-64 8	9.5	10.5	K	1	..	38371b
11	947	2.1	-15 55	9.2	9.2	Ao	2	3,2	45972b	61	1040	2.6	+38 53	8.6	8.6	B8	4	..	37365i
12	2013	2.1	-26 37	7.9	8.9	Ko	5	..	20533b	62	956	2.6	+34 32	8.7	9.5	G5	1	..	38934i
13	2197	2.1	-31 13	9.1	10.3	A5	2	..	24442b	63	961	2.6	+33 8	8.6	9.0	F5	2	..	37365i
14	164	2.1	-79 17	9.3	10.3	Ko	2	..	15162b	64	738	2.6	+ 9 14	8.7	9.1	F5	4	..	3841ob
15	1049	2.2	+45 29	9.5	9.6	A2	1	..	3894oi	65	811	2.6	+ 7 52	8.8	9.1	Fo	2	..	3841ob
16	1035	2.2	+38 52	var.	var.	Nb	..	R	M	66	812	2.6	+ 7 46	6.79	7.79	Ko	5	E	38075i
17	896	2.2	+32 34	8.0	8.8	G5	2	..	37365i	67	845	2.6	+ 6 19	8.3	9.5	K5	3	..	3841ob
18	767	2.2	+21 42	9.8	9.9	A5	3	..	37388i	68	841	2.6	+ 4 49	9.0	9.5	F8	2	..	14663b
19	700	2.2	+16 52	9.0	9.1	A5	6	..	4420m	69	1035	2.6	- 8 47	6.88	6.83	B8	..	1,10	56,79
20	718	2.2	+10 46	7.03	7.03	Ao	7	E	37567i	70	1069	2.6	-11 2	10.4	11.0	G	1	..	24605b
21	736	2.2	+ 9 21	6.26	6.82	Go	..	5,8	56,79	71	1066	2.6	-13 42	10.4	10.9	F8	2	..	24605b
22	1015	2.2	- 3 14	9.2	9.6	F5	2	..	17409b	72	1013	2.6	-20 14	8.6	8.6	F2	6	..	17402b
23	1014	2.2	- 3 38	8.10	8.08	B9	3	..	17409b	73	1965	2.6	-28 42	9.0	10.0	Go	2	..	20533b
24	1009	2.2	-20 44	8.4	8.8	A3	5	..	17402b	74	1877	2.6	-38 6	8.7	9.7	Ko	2	..	42101b
25	2198	2.2	-31 8	9.4	10.0	Fo	2	..	24442b	75	646	2.6	-52 19	7.8	8.4	F8	7	..	3970ob
26	2116	2.2	-33 11	9.0	9.4	F2	4	..	24442b	76	403	2.6	-64 40	8.96	10.3	K5	3	..	38371b
27	1756	2.2	-42 39	9.7	10.0	F5	3	..	20648b	77	1184	2.7	+42 33	8.0	8.8	G5	3	..	38088i
28	1558	2.2	-49 22	9.9	10.7	Ko	1	..	3840ob	78	1071	2.7	-11 4	10.4	10.8	F5	2	..	24605b
29	403	2.2	-61 33	8.6	9.2	F5	5	..	38371b	79	1070	2.7	-11 41	8.6	8.7	A3	6	..	24605b
30	322	2.2	-69 8	9.0	10.4	Ma	..	..	M	80	1075	2.7	-12 0	8.0	8.0	Ao	8	..	24605b
31	321	2.2	-69 38	8.32	8.7	A3	8	..	2054ob	81	1028	2.7	-17 26	7.16	7.58	F5	9	..	12628b
32	341	2.2	-72 36	8.7	9.2	F8	2	..	2054ob	82	2030	2.7	-37 46	9.4	10.9	G5	1	..	42101b
33	1077	2.3	+41 55	8.7	8.7	Ao	3	..	38088i	83	1764	2.7	-42 46	9.7	10.9	K2	2	..	20648b
34	751	2.3	+28 9	7.00	7.06	A2	5	0,4	38161i	84	1670	2.7	-47 15	9.2	10.6	Ko	2	..	3840oi
35	855	2.3	+23 7	9.0	9.0	B9	3	R	38213i	85	735	2.7	-55 4	9.1	9.8	K2	3	..	3970ob
36	701	2.3	+16 58	10.0	11.1	K2	1	..	4420m	86	736	2.7	-55 38	8.5	9.8	K5	1	..	20548b
37	840	2.3	+ 4 24	8.2	8.2	Ao	7	..	14663b	87	213	2.8	+75 29	8.57	8.65	A3	3	0,3	37343i
38	868	2.3	+ 2 21	7.9	7.9	B9	4	..	37594i	88	1192	2.8	+39 28	var.	var.	B5	4	R	37365i
39	849	2.3	+ 0 55	8.5	9.5	Ko	1	5,1	38183i	89	1041	2.8	+38 34	7.02	7.80	G5	6	0,4	37365i
40	1067	2.3	-11 51	9.2	9.3	A2	5	..	24605b	90	770	2.8	+21 22	9.4	9.3	B5	3	..	37388i
41	1758	2.3	-42 16	9.1	9.7	Ko	2	..	20648b	91	703	2.8	+16 4	9.4	9.4	Ao	4	..	4420m
42	1562	2.3	-49 43	4.92	7.4	K5	..	5, R	28,197	92	812	2.8	+13 51	9.0	9.8	G5	3	..	4420m
43	364	2.3	-66 52	9.4	9.7	F2	3	..	38367b	93	1076	2.8	-12 37	6.14	6.64	F8	6	..	20232b
44	960	2.4	+33 59	9.4	9.5	A2	2	..	37365i	94	1050	2.8	-14 41	8.4	9.4	Ko	4	..	12628b
45	749	2.4	+15 44	7.5	8.6	K2	8	2,4	4420m	95	1102	2.8	-19 32	6.68	7.4	Go	7	..	1237ob
46	843	2.4	+ 7 1	8.5	9.5	Ko	4	..	3841ob	96	2423	2.8	-23 31	9.4	9.1	Ao	4	..	17402b
47	1049	2.4	- 4 21	8.6	9.1	F8	1	..	17409b	97	2146	2.8	-32 51	9.3	9.4	Fo	4	..	24442b
48	2223	2.4	-25 18	9.3	9.4	Fo	2	E	20533b	98	2106	2.8	-35 10	8.03	8.5	F2	5	..	42101b
49	1759	2.4	-42 7	8.9	9.1	F5	5	..	20648b	99	1765	2.8	-42 34	9.9	9.8	F2	2	..	20648b
50	1806	2.4	-45 6	9.52	10.0	Ko	1	..	18482b	100	461	2.9	+65 42	9.9	9.9	Ao	1	..	38952i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

33100

5^h 2^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	503	2.9	+64 10	8.6	9.1	F8	4	..	36654i	51	1045	3.2	+38 15	8.5	9.9	Ma	2	..	37365i
2	818	2.9	+58 54	9.0	9.0	Ao	1	..	38907i	52	1021	3.2	+36 53	7.8	7.6	B2	6	R	37365i
3	1315	2.9	+49 17	8.4	9.4	Ko	3	..	38125i	53	1023	3.2	+36 10	9.4	9.4	A	2	..	37365i
4	1103	2.9	+47 44	9.0	10.0	Ko	2	..	38125i	54	889	3.2	+20 24	8.7	9.0	Fo	2	..	37388i
5	1060	2.9	+37 34	8.4	9.2	G5	4	R	37365i	55	724	3.2	+11 38	7.41	8.41	Ko	3	..	37567i
6	898	2.9	+32 18	8.5	8.8	F2	1	..	38921i	56	816	3.2	+5 10	9.01	10.01	Ko	2	..	38410b
7	820	2.9	+29 28	9.1	9.9	G5	3	0,2	37525i	57	1142	3.2	-2 35	9.2	9.3	A5	3	..	12391b
8	813	2.9	+13 50	9.0	9.6	Go	4	..	4420m	58	1090	3.2	-6 20	8.0	9.0	Ko	3	..	17409b
9	870	2.9	+8 41	9.0	9.3	Fo	4	..	38410b	59	1074	3.2	-11 10	9.9	10.0	A3	4	..	24605b
10	777	2.9	+3 37	7.7	7.7	Ao	5	..	37594i	60	1075	3.2	-11 23	10.4	11.4	Ko	1	..	24605b
11	1162	2.9	-5 13	2.92	3.00	A3	..	R	2224c	61	1079	3.2	-12 12	10.4	11.5	K2	1	..	24605b
12	1067	2.9	-13 46	10.4	11.6	K5	1	..	24605b	62	1080	3.2	-12 43	6.69	8.04	Ma	3	..	20232b
13	1880	2.9	-38 16	9.0	9.1	F5	3	..	42101b	63	1029	3.2	-17 25	7.36	8.36	Ko	7	..	12628b
14	1703	2.9	-41 35	8.8	9.7	G5	3	..	20648b	64	307	3.3	+69 42	7.24	8.24	Ko	4	..	38112i
15	1860	2.9	-44 55	7.82	9.1	Ko	6	5,5	18482b	65	570	3.3	+63 59	8.9	9.9	Ko	1	..	38907i
16	768	2.9	-54 33	6.14	8.5	K5	8	5,8	39700b	66	860	3.3	+57 15	8.9	9.9	Ko	2	..	38970i
17	305	2.9	-67 59	8.7	9.5	G5	6	0,5	20430b	67	970	3.3	+46 50	5.59	6.01	F5	6	3,5-	38940i
18	1194	3.0	+40 2	8.02	8.00	B9	3	..	37365i	68	1088	3.3	+41 46	8.6	8.9	Fo	3	..	38088i
19	958	3.0	+34 45	9.4	9.4	A	2	..	37365i	69	..	3.3	+29 40	..	..	Go	3	R	37525i
20	753	3.0	+28 59	8.8	8.8	Ao	3	2,2	38161i	70	754	3.3	+29 1	8.8	9.4	Go	2	5,2-	38921i
21	853	3.0	+19 45	6.55	7.33	G5	5	0,4	37567i	71	890	3.3	+20 20	8.5	8.6	A2	3	..	37388i
22	839	3.0	+14 59	7.99	7.99	Ao	5	0,8	37567i	72	783	3.3	+18 50	7.9	8.7	G5	1	..	38213i
23	814	3.0	+7 37	9.2	10.4	K5	1	..	38410b	73	704	3.3	+16 14	9.7	10.5	G5	3	..	4420m
24	854	3.0	-0 44	9.0	9.1	A3	2	0,2	38183i	74	958	3.3	+0 49	8.1	8.9	G5	3	..	37594i
25	810	3.0	-1 0	8.5	8.8	Fo	3	5,1	12391b	75	957	3.3	+0 37	9.0	9.4	F5	4	..	14663b
26	1101	3.0	-10 0	8.46	8.46	Ao	7	..	24605b	76	1143	3.3	-2 47	9.9	10.7	G5	1	..	12391b
27	1078	3.0	-12 22	9.9	10.5	Go	2	..	24605b	77	1081	3.3	-9 14	8.6	8.6	Ao	3	..	14664b
28	1070	3.0	-13 43	10.4	11.5	K2	2	..	24605b	78	1103	3.3	-19 9	8.6	9.7	K5	2	..	12628b
29	2431	3.0	-23 19	9.6	9.5	Go	1	..	17402b	79	2233	3.3	-25 46	9.6	10.0	K2	1	..	20533b
30	1672	3.0	-47 56	9.3	10.0	Ao	4	..	38400b	80	1635	3.3	-48 49	7.7	9.8	K5	3	..	38400b
31	1567	3.0	-49 5	9.9	10.1	Fo	3	..	38400b	81	418	3.3	-62 24	9.0	9.3	F2	5	..	38371b
32	1367	3.0	-51 34	8.4	9.5	G5	4	..	39700b	82	404	3.3	-64 20	9.7	10.5	G5	1	..	38371b
33	..	3.0	-66 49	..	..	Oc	..	..	76,28	83	1065	3.4	+37 14	8.6	8.6	B9	2	..	37365i
34	930	3.1	+52 38	8.7	8.7	Ao	3	..	38970i	84	1025	3.4	+36 24	8.2	8.2	B9	4	..	37365i
35	1054	3.1	+45 20	8.9	8.9	Ao	2	..	38088i	85	822	3.4	+29 40	6.61	7.11	F8	6	..	36997i
36	821	3.1	+29 50	8.6	8.7	A3	3	3,2	37525i	86	772	3.4	+22 1	9.8	9.8	A	2	..	37388i
37	731	3.1	+27 10	9.4	10.5	K2	1	..	38921i	87	848	3.4	+6 22	8.5	9.0	F8	6	..	38410b
38	750	3.1	+15 6	8.94	8.94	Ao	5	..	4420m	88	817	3.4	+5 16	9.0	9.8	G5	2	..	38410b
39	814	3.1	+13 49	9.7	9.7	Ao	3	..	4420m	89	911	3.4	+1 9	8.69	8.69	Ao	5	..	14663b
40	870	3.1	+2 20	9.4	9.7	F2	2	..	14663b	90	1144	3.4	-2 25	8.6	8.6	B9	5	..	14664b
41	1073	3.1	-11 15	10.4	10.8	F5	2	..	24605b	91	1054	3.4	-3 58	8.6	9.6	Ko	2	..	17409b
42	1051	3.1	-14 6	8.14	8.92	G5	8	..	24605b	92	1053	3.4	-4 13	9.2	9.2	Ao	2	..	17409b
43	1012	3.1	-22 47	8.6	9.4	K2	3	..	17402b	93	1102	3.4	-10 37	10.4	10.8	F5	2	..	24605b
44	1971	3.1	-28 47	9.3	9.8	F5	1	..	20533b	94	1071	3.4	-13 33	9.2	9.5	F2	3	..	24605b
45	738	3.1	-55 29	8.7	9.7	G5	1	..	20548b	95	1030	3.4	-17 21	8.6	8.9	Fo	3	..	12628b
46	739	3.1	-55 35	7.66	8.6	Ko	6	..	20548b	96	2435	3.4	-23 24	9.6	9.7	Ko	2	5,1	17402b
47	732	3.1	-57 49	8.1	8.2	Ao	6	..	42691b	97	2209	3.4	-31 27	8.0	10.5	Ko	2	..	24442b
48	382	3.1	-67 3	9.3	10.1	G5	2	..	38367b	98	1708	3.4	-41 54	8.4	8.3	Ao	7	..	20648b
49	504	3.2	+64 37	8.4	8.8	F5	4	..	38907i	99	306	3.4	-68 39	9.1	9.6	F8	2	..	20540b
50	763	3.2	+61 20	8.9	8.9	Ao	3	..	38907i	100	139	3.4	-80 42	9.5	9.6	A5	2	..	20557b

THE HENRY DRAPER CATALOGUE.

33200

5^h 3^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	863	3.5	+53 5	7.9	8.2	Fo	4	0,3	14302i	51	1026	3.8	+36 44	8.6	8.6	B9	2	..	37365i
2	1194	3.5	+40 43	7.8	8.2	F5	6	..	37365i	52	734	3.8	+27 26	6.91	7.33	F5	6	0,4	38161i
3	1067	3.5	+37 11	6.17	5.98	B2	8	1,6	37365i	53	840	3.8	+14 14	7.9	9.3	Ma	3	..	4420m
4	732	3.5	+27 55	5.97	6.05	A3	7	0,7-	36997i	54	743	3.8	+9 42	5.42	5.48	A2	..	R	56,79
5	850	3.5	+6 14	8.3	9.3	Ko	4	..	38410b	55	819	3.8	+5 56	9.0	9.8	G5	1	..	38410b
6	811	3.5	-1 39	8.5	9.5	Ko	1	..	12391b	56	1056	3.8	-4 35	5.23	5.65	F5	..	3,10	2224c
7	1023	3.5	-2 57	6.87	7.21	F2	7	..	17409b	57	1104	3.8	-10 44	9.2	10.0	G5	2	..	24605b
8	1024	3.5	-3 8	7.20	7.70	F8	6	..	17409b	58	1078	3.8	-21 35	8.5	8.8	F2	4	..	12370b
9	1103	3.5	-10 34	10.4	11.0	G	1	..	24605b	59	2205	3.8	-30 46	8.8	10.5	F5	2	..	24442b
10	1016	3.5	-22 46	9.2	9.4	Go	3	..	17402b	60	1713	3.8	-41 24	10.9	10.5	G5	2	..	20648b
11	2234	3.5	-25 11	8.2	8.7	Ko	5	..	20533b	61	649	3.8	-52 49	9.8	9.8	Ao	2	..	39700b
12	2036	3.5	-37 19	8.4	9.4	Ko	4	..	42101b	62	735	3.8	-57 37	4.76	6.2	F8	..	2,R	28,197
13	421	3.5	-65 9	8.4	9.8	Mb	3	..	38371b	63	343	3.8	-71 59	8.6	9.6	Ko	3	..	20540b
14	104	3.5	-82 38	8.5	9.5	Ko	4	..	20559b	64	463	3.9	+65 41	9.7	9.7	A	1	..	38952i
15	99	3.5	-83 12	9.6	9.6	Ao	5	..	20557b	65	505	3.9	+64 49	8.0	9.2	K5	1	..	38907i
16	1048	3.6	+38 14	9.1	9.1	B9	4	..	37365i	66	766	3.9	+61 44	5.99	5.99	Ao	10	..	36654i
17	867	3.6	+31 49	7.8	7.9	A5	4	0,4-	38921i	67	864	3.9	+53 20	7.12	8.12	Ko	4	5,3	37366i
18	863	3.6	+23 9	9.4	9.4	A	2	..	37388i	68	1027	3.9	+36 39	8.5	8.8	Fo	2	..	37365i
19	751	3.6	+15 6	9.7	10.5	G5	1	..	4420m	69	803	3.9	+30 27	7.66	8.16	F8	4	..	38921i
20	817	3.6	+13 48	8.5	8.6	A2	6	0,3	4420m	70	776	3.9	+21 52	8.2	8.3	A2	4	..	37388i
21	727	3.6	+11 22	7.7	8.0	Fo	2	..	38167i	71	814	3.9	-1 22	8.3	9.5	K5	1	..	12391b
22	959	3.6	+1 0	8.59	9.77	K5	1	..	14663b	72	815	3.9	-1 49	10.0	10.0	Ao	2	..	12391b
23	1025	3.6	-3 26	8.0	8.3	F2	7	..	17409b	73	1018	3.9	-22 28	8.5	9.4	Ko	1	..	12370b
24	1037	3.6	-8 47	5.67	5.62	B8	..	..	56,79	74	410	3.9	-63 44	9.4	9.8	F5	3	..	38371b
25	1073	3.6	-13 4	10.4	10.8	F5	2	..	24605b	75	464	4.0	+65 56	7.88	8.22	F2	4	..	36654i
26	1048	3.6	-16 55	9.1	9.7	Go	2	..	45972b	76	752	4.0	+15 28	4.86	5.14	Fo	..	2,9-	56,79
27	1711	3.6	-41 18	9.4	9.4	F8	3	..	20648b	77	1151	4.0	-2 12	9.2	9.2	A	1	..	12391b
28	1772	3.6	-42 4	9.1	9.8	Ko	2	..	20648b	78	1149	4.0	-2 38	8.6	9.6	Ko	1	..	12391b
29	778	3.6	-56 55	7.8	8.5	F2	5	E	42691b	79	1150	4.0	-2 51	8.6	9.4	G5	3	..	17409b
30	733	3.6	-57 20	7.70	9.4	K2	3	..	42691b	80	1168	4.0	-5 7	9.2	9.8	Go	1	..	12391b
31	371	3.7	+67 21	7.12	7.12	Ao	7	..	36654i	81	1078	4.0	-11 23	9.9	10.7	G5	2	..	24605b
32	1196	3.7	+40 53	8.1	7.9	B3	6	..	37365i	82	1074	4.0	-13 52	9.5	10.7	K5	2	..	24605b
33	774	3.7	+21 43	9.5	9.5	Ao	2	..	38213i	83	2029	4.0	-26 55	7.9	8.4	G5	6	..	20533b
34	728	3.7	+11 22	7.7	8.0	Fo	1	..	38167i	84	2080	4.0	-34 7	8.5	9.8	F5	4	..	24442b
35	873	3.7	+9 2	8.5	9.6	K2	2	..	38410b	85	309	4.0	-71 27	5.30	7.8	Ko	..	R	56,121
36	785	3.7	+3 6	6.54	6.54	Ao	6	..	37594i	86	874	4.1	+8 40	9.0	10.1	K2	1	..	38410b
37	1052	3.7	-14 23	9.7	10.8	K2	2	..	24605b	87	851	4.1	+6 38	10.4	11.2	G5	1	..	38410b
38	950	3.7	-15 14	6.62	7.40	G5	4	5,4 R	44172b	88	985	4.1	-7 18	8.28	8.26	B9	4	..	14664b
39	1015	3.7	-20 15	7.34	8.6	Ko	7	..	17402b	89	1082	4.1	-12 35	9.7	10.9	K5	2	..	24605b
40	2069	3.7	-29 6	8.2	9.1	K2	4	..	20533b	90	952	4.1	-15 37	8.6	9.6	Ko	3	2,2	39704b
41	2038	3.7	-37 50	8.7	10.4	K2	2	..	42101b	91	1031	4.1	-17 27	8.0	8.4	F5	4	..	12628b
42	1790	3.7	-39 47	10.2	11.2	Ko	2	..	42101b	92	1010	4.1	-18 14	7.64	8.82	K5	4	..	12628b
43	375	3.7	-60 16	9.6	9.6	Ao	2	..	38371b	93	405	4.1	-64 41	7.94	9.1	G5	6	..	38371b
44	312	3.7	-74 29	6.97	6.8	Ao	9	..	20540b	94	371	4.1	-66 34	Cl.	Cl.	Con.	2	R	38367b
45	163	3.7	-78 20	7.6	8.1	F8	6	..	15162b	95	187	4.2	+77 58	8.6	8.6	Ao	2	..	37343i
46	966	3.8	+55 28	8.9	9.3	F5	2	..	14302i	96	734	4.2	+62 34	6.38	6.44	A2	9	3,8	38907i
47	1037	3.8	+51 56	9.2	9.3	A2	2	..	38970i	97	972	4.2	+46 49	8.0	8.0	Ao	7	1,3	38940i
48	1318	3.8	+49 25	8.4	9.4	Ko	3	..	38125i	98	1198	4.2	+39 10	8.2	9.0	G5	4	..	37365i
49	1104	3.8	+47 43	9.5	9.6	A2	2	..	38125i	99	804	4.2	+30 40	6.91	7.91	Ko	4	..	36997i
50	1203	3.8	+43 29	9.2	9.2	B9	2	..	38088i	100	778	4.2	+22 2	8.0	8.0	Ao	5	..	37388i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

33300

5^h 4^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	706	4.2	+16 8	9.2	9.2	Ao	3	..	4420m	51	2045	4.5	-37 30	9.0	10.6	K2	1	..	42101b
2	731	4.2	+11 41	8.5	8.9	F5	3	..	38167i	52	2044	4.5	-37 46	10.0	10.1	Fo	2	..	42101b
3	874	4.2	+ 2 59	8.5	8.5	Ao	3	..	37594i	53	1797	4.5	-39 41	8.7	9.1	F2	5	..	42101b
4	1106	4.2	-10 24	9.9	10.0	A2	3	..	24605b	54	459	4.5	-58 20	7.4	9.0	K2	3	..	42691b
5	1372	4.2	-51 4	8.5	9.0	F2	5	..	39700b	55	238	4.6	+74 25	7.25	7.31	A2	6	0,6	37343i
6	1039	4.3	+51 30	9.5	9.5	Ao	1	..	38970i	56	821	4.6	+58 33	8.0	8.8	G5	2	..	37407i
7	1117	4.3	+44 37	8.0	8.4	F5	3	0,2	37391i	57	1101	4.6	+42 2	var.	var.	A3	2	R	38088i
8	1074	4.3	+37 11	8.7	8.7	B8	4	..	37365i	58	823	4.6	+ 5 59	9.2	10.0	G5	1	..	38410b
9	779	4.3	+21 52	9.4	9.5	A2	2	..	38213i	59	1011	4.6	-18 2	8.6	8.9	F2	3	..	12628b
10	707	4.3	+16 15	10.4	10.4	A	2	..	4420m	60	1780	4.6	-42 22	10.1	9.7	Go	3	..	20648b
11	753	4.3	+15 33	9.0	10.0	Ko	2	..	4420m	61	1648	4.6	-48 51	9.0	10.4	K	1	..	18482b
12	819	4.3	+13 5	8.7	8.8	A2	2	..	4420m	62	782	4.6	-56 22	8.4	10.0	Mb	2	..	20548b
13	852	4.3	+ 7 4	7.4	7.9	F8	5	E	38075i	63	217	4.7	+75 50	8.27	9.05	G5	4	5,3	37343i
14	820	4.3	+ 5 46	8.5	8.6	A3	4	..	14663b	64	1076	4.7	+37 11	7.8	8.8	Ko	4	..	37365i
15	790	4.3	+ 3 45	9.0	9.4	F5	3	..	14663b	65	808	4.7	+30 10	8.66	9.66	Ko	3	0,2 R	37525i
16	1094	4.3	- 6 34	8.0	8.0	B9	4	..	17409b	66	772	4.7	+25 1	8.46	9.24	G5	2	..	38161i
17	1080	4.3	-11 6	9.7	10.1	F5	4	..	24605b	67	708	4.7	+16 22	10.4	10.5	A2	1	..	4420m
18	1075	4.3	-13 2	8.0	8.6	Go	9	..	24605b	68	751	4.7	+ 9 50	7.7	7.7	Ao	4	..	38204i
19	2030	4.3	-26 52	9.0	8.9	A3	3	..	20533b	69	855	4.7	+ 6 14	9.2	10.3	K2	1	..	38410b
20	1777	4.3	-42 0	9.0	9.4	Ko	3	..	20648b	70	1172	4.7	- 5 40	9.0	9.0	Ao	2	..	17409b
21	1776	4.3	-42 18	8.9	8.5	A2	6	..	20648b	71	1082	4.7	-11 14	8.0	8.3	Fo	8	..	24605b
22	423	4.3	-65 54	9.1	10.1	Ko	2	..	38371b	72	1077	4.7	-13 45	9.9	10.2	Fo	4	..	24605b
23	373	4.4	+67 15	7.58	7.86	Fo	4	..	36654i	73	1084	4.7	-21 53	9.2	9.4	F5	2	..	12370b
24	1193	4.4	+42 37	7.9	7.9	B9	4	..	38088i	74	1022	4.7	-22 46	8.0	8.2	Fo	5	..	12370b
25	755	4.4	+28 37	8.4	8.4	Ao	3	..	36997i	75	2251	4.7	-25 37	9.0	9.5	G5	2	..	20533b
26	821	4.4	+ 5 40	8.5	8.8	F2	2	..	37594i	76	2088	4.7	-34 3	9.6	10.4	Go	2	..	24442b
27	817	4.4	- 1 37	9.0	9.0	Ao	3	..	12391b	77	2126	4.7	-35 51	6.44	7.1	G5	7	..	42101b
28	1040	4.4	- 8 53	4.34	4.15	B2	..	R	56,79	78	1875	4.7	-44 6	8.0	10.0	K5	2	..	18482b
29	2087	4.4	-27 4	10.5	9.8	A3	1	..	20533b	79	655	4.7	-52 32	8.7	9.8	G5	3	..	39700b
30	2121	4.4	-35 21	9.4	10.4	G5	2	..	42101b	80	413	4.7	-63 17	9.3	10.3	Ko	2	..	38371b
31	1873	4.4	-44 57	7.10	7.5	Ao	10	R	18482b	81	973	4.8	+46 19	8.8	9.2	F5	4	..	38940i
32	1062	4.5	+45 32	8.0	8.1	A2	3	2,3	37391i	82	829	4.8	+29 40	8.5	8.9	F5	3	0,3-	38921i
33	1003	4.5	+35 14	7.72	8.00	Fo	6	..	37365i	83	822	4.8	+ 7 5	9.4	9.9	F8	2	..	38410i
34	871	4.5	+31 55	7.9	8.7	G5	3	5,4	36997i	84	1083	4.8	-11 5	9.2	9.5	F2	3	..	24605b
35	822	4.5	+13 52	8.2	8.7	F8	7	R	4420m	85	1078	4.8	-13 2	9.2	9.8	Go	5	..	24605b
36	821	4.5	+13 25	6.73	7.07	F2	8	3,9	37567i	86	1017	4.8	-20 21	8.6	8.8	A3	4	..	44357b
37	725	4.5	+10 46	7.9	8.7	G5	4	..	38167i	87	2851	4.8	-24 12	9.6	10.1	F5	1	..	44357b
38	747	4.5	+ 9 21	8.5	8.5	Ao	2	..	38167i	88	2077	4.8	-29 2	10.3	9.7	Ao	2	..	20533b
39	749	4.5	+ 9 6	7.9	8.9	Ko	3	..	38167i	89	1799	4.8	-39 8	9.4	9.7	F8	2	..	42101b
40	819	4.5	+ 8 3	7.09	7.59	F8	6	E	38075i	90	1699	4.8	-43 19	9.3	10.3	F5	2	..	20648b
41	818	4.5	+ 7 27	9.7	9.8	A2	2	..	38410b	91	1823	4.8	-45 54	9.2	9.5	Ao	4	..	18482b
42	853	4.5	+ 6 57	9.0	10.0	Ko	1	..	38410b	92	137	4.9	+83 43	8.8	9.2	F5	5	..	38330i
43	822	4.5	+ 5 6	9.16	9.22	A2	2	..	14663b	93	1064	4.9	+45 38	8.4	9.0	Go	2	..	38940i
44	916	4.5	+ 1 50	9.0	9.8	G5	1	E	38183i	94	1063	4.9	+45 28	8.9	9.0	A3	3	..	38940i
45	1155	4.5	- 2 16	6.72	7.50	G5	6	..	17409b	95	1102	4.9	+41 23	8.0	8.0	Ao	5	..	38940i
46	1154	4.5	- 2 29	9.2	9.3	A2	3	..	12391b	96	1201	4.9	+39 49	8.5	8.5	B9	4	..	37365i
47	1054	4.5	-14 2	9.9	11.1	K5	2	..	24605b	97	1077	4.9	+37 41	8.6	9.4	G5	4	..	37365i
48	1055	4.5	-14 51	8.11	8.11	Ao	5	2,2	39704b	98	1004	4.9	+35 50	7.32	8.39	K2	6	..	37365i
49	1053	4.5	-16 8	9.1	9.7	Go	2	..	39704b	99	970	4.9	+33 59	10.0	10.0	A	2	..	37365i
50	2250	4.5	-25 46	9.4	9.2	F5	3	..	20533b	100	897	4.9	+20 28	7.75	8.03	Fo	4	..	37388i

THE HENRY DRAPER CATALOGUE.

33400

5^h 4^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	858	4.9	+19 10	8.8	8.9	A2	1	..	38213b	51	2856	5.2	-24 54	9.35	9.0	B9	3	..	17402b
2	862	4.9	+17 19	7.9	7.9	B8	6	..	37567i	52	2092	5.2	-34 38	var.	var.	Mc	2	R	24442b
3	876	4.9	+2 49	8.7	8.7	A0	3	..	37594i	53	1724	5.2	-41 2	8.4	7.9	B9	7	..	42101b
4	1174	4.9	-5 38	8.55	..	Nb	..	..	M	54	1788	5.2	-42 30	10.1	10.1	Go	4	..	20648b
5	1084	4.9	-12 9	8.0	8.4	F5	8	..	24605b	55	407	5.2	-60 59	8.6	9.3	A0	4	..	38371b
6	953	4.9	-15 47	8.4	9.0	Go	6	..	12628b	56	406	5.2	-61 43	9.1	10.1	Ko	2	..	38371b
7	1033	4.9	-17 19	9.2	9.8	Go	2	..	45972b	57	415	5.2	-63 43	9.2	9.8	Go	2	..	38371b
8	2215	4.9	-30 18	8.0	9.7	F2	3	..	24442b	58	1322	5.3	+49 54	8.9	8.9	B9	4	..	38125i
9	741	4.9	-57 41	9.1	9.8	G5	2	..	20548b	59	1126	5.3	+44 19	7.49	7.49	B8	5	0,4	38940i
10	1214	5.0	+43 20	8.0	8.1	A3	3	..	37391i	60	1215	5.3	+43 37	8.5	8.5	B9	2	..	38088i
11	1197	5.0	+42 17	7.9	7.9	B8	4	..	38088i	61	1106	5.3	+41 6	8.0	7.8	B3	6	..	37365i
12	1105	5.0	+41 47	8.2	8.2	B8	4	..	38088i	62	1205	5.3	+39 59	6.83	6.78	B8	8	1,6-	37365i
13	830	5.0	+29 37	7.01	7.01	A0	6	..	36779i	63	833	5.3	+29 48	6.72	8.07	Ma	3	..	36997i
14	757	5.0	+28 52	8.1	8.1	A0	4	..	36997i	64	872	5.3	+23 6	9.0	9.0	A0	2	..	37388i
15	783	5.0	+21 40	8.7	8.7	A0	2	..	38213i	65	848	5.3	+22 16	8.5	8.5	B8	4	..	37388i
16	711	5.0	+16 29	9.2	10.0	G5	3	..	4420m	66	785	5.3	+22 0	8.4	8.7	F2	2	..	37388i
17	713	5.0	+16 22	9.0	9.8	G5	2	..	4420m	67	843	5.3	+14 48	7.79	7.77	B9	7	0,4	4420m
18	755	5.0	+15 9	8.19	8.69	F8	5	0,3	4420m	68	858	5.3	+6 47	8.5	8.8	F0	5	..	38410b
19	867	5.0	-0 41	6.35	7.35	Ko	5	0,8	37594i	69	857	5.3	+6 26	9.0	10.2	K5	2	..	38410b
20	1085	5.0	-12 47	10.4	11.0	Go	3	..	24605b	70	1088	5.3	-12 32	11.0	11.0	A0	2	..	24605b
21	2255	5.0	-25 46	9.8	9.5	A0	2	..	20533b	71	2260	5.3	-25 20	9.0	9.0	F0	4	..	20533b
22	2173	5.0	-32 11	9.0	9.7	F2	2	..	24442b	72	1988	5.3	-28 10	8.8	9.8	K5	2	..	20533b
23	2136	5.0	-33 53	8.7	8.6	A2	7	..	24442b	73	1727	5.3	-41 21	6.60	7.7	Go	8	..	42101b
24	2047	5.0	-37 45	9.0	10.0	A2	2	R	42101b	74	421	5.3	-59 11	8.6	9.3	F5	3	..	20548b
25	1699	5.0	-46 24	8.9	9.4	Go	3	..	18482b	75	377	5.3	-60 0	7.92	8.9	Ko	7	..	42691b
26	100	5.0	-83 6	9.4	10.4	K	1	..	20557b	76	421	5.3	-62 56	7.7	8.1	F5	7	..	38371b
27	812	5.1	+30 42	6.76	7.76	Ko	6	..	36997i	77	327	5.3	-69 2	8.2	9.2	Ko	5	..	20540b
28	715	5.1	+16 19	8.3	9.3	Ko	2	..	4420m	78	736	5.4	+62 26	8.9	9.0	A2	3	1,2	38136i
29	820	5.1	-1 16	8.3	8.6	F0	4	..	17409b	79	1235	5.4	+48 12	8.5	9.5	Ko	2	..	38125i
30	1158	5.1	-1 58	8.6	9.2	Go	3	..	12391b	80	720	5.4	+16 28	9.7	9.7	A0	3	..	4420m
31	1061	5.1	-3 59	7.70	7.68	B9	4	..	17409b	81	827	5.4	+7 29	9.0	9.1	A5	5	..	38410b
32	1086	5.1	-9 14	9.2	9.2	B8	2	E	14664b	82	795	5.4	+3 53	9.7	11.1	Ma	..	..	M
33	1108	5.1	-10 38	9.7	10.9	K5	1	..	24605b	83	923	5.4	+1 14	9.0	9.0	A0	4	..	14663b
34	1084	5.1	-11 54	9.2	10.3	K2	1	..	24605b	84	2176	5.4	-32 28	9.0	9.7	Go	3	..	24442b
35	1086	5.1	-12 54	10.4	11.0	G	1	..	24605b	85	800	5.4	-53 41	7.99	8.0	F8	5	..	39700b
36	2137	5.1	-33 26	8.7	9.1	F2	5	..	24442b	86	311	5.4	-68 13	8.1	8.1	B9	6	1,7	38367b
37	772	5.1	-54 21	8.6	9.6	Ko	3	..	39700b	87	328	5.4	-69 18	9.0	9.8	G5	3	..	38367b
38	742	5.1	-55 55	8.5	9.8	K5	2	..	20548b	88	314	5.4	-74 50	9.43	9.5	A5	4	..	15162b
39	420	5.1	-62 11	8.7	9.5	G5	3	..	38371b	89	740	5.5	+12 16	8.3	8.3	A0	3	..	37567i
40	180	5.2	+78 16	8.0	8.3	F0	6	0,4	37558i	90	924	5.5	+1 58	9.4	10.2	G5	1	..	14663b
41	735	5.2	+62 59	6.74	7.02	F0	7	..	36654i	91	971	5.5	+0 41	8.8	9.2	F5	4	3,4	14663b
42	770	5.2	+61 20	9.5	10.1	Go	1	..	38907i	92	822	5.5	-1 22	10.0	11.2	K5	2	..	12391b
43	1107	5.2	+47 30	9.2	10.2	Ko	..	..	M	93	1057	5.5	-16 6	8.8	8.9	A2	4	1,4	12628b
44	847	5.2	+22 58	8.8	9.2	F5	4	..	37388i	94	1056	5.5	-16 13	9.0	9.6	Go	2	..	39704b
45	842	5.2	+14 14	9.0	9.5	F8	4	..	4420m	95	1028	5.5	-22 37	7.08	7.7	F0	8	..	12370b
46	826	5.2	+7 25	9.7	9.8	A2	2	..	38410b	96	2083	5.5	-29 26	9.3	9.4	A5	2	..	24442b
47	827	5.2	+5 12	7.31	7.31	A0	5	..	37594i	97	2236	5.5	-31 13	8.8	10.0	F8	3	..	24442b
48	920	5.2	+1 30	9.4	9.4	A0	2	..	14663b	98	1580	5.5	-49 26	7.6	7.5	A0	9	..	18482b
49	989	5.2	-7 11	8.17	8.73	Go	3	..	14664b	99	380	5.6	+66 6	9.2	9.2	A0	3	..	38907i
50	2466	5.2	-23 15	7.36	8.5	Ko	6	..	12370b	100	1014	5.6	+56 24	7.8	7.9	A2	5	2,3	37407i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

33500

5^h 5^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1323	m. 5.6	° 49 45	7.67	7.95	Fo	3	5.3	2219b	51	2239	m. 5.9	° -31 4	8.8	9.4	Ao	3	..	24442b
2	1325	5.6	+49 33	9.2	9.3	A3	3	..	38125i	52	870	6.0	+54 40	8.6	8.9	F2	2	..	3897oi
3	905	5.6	+32 47	7.58	8.00	F5	4	..	37365i	53	869	6.0	+53 54	8.0	8.0	Ao	4	0,3-	37366i
4	878	5.6	+31 23	10.0	10.0	A	2	..	37525i	54	759	6.0	+15 55	5.36	6.36	Ko	..	2,8-	56,79
5	878	5.6	+ 8 36	8.7	9.0	Fo	3	..	38410b	55	1161	6.0	- 2 22	6.32	7.10	G5	7	..	17409b
6	870	5.6	- 0 4	8.93	9.35	F5	3	..	37594i	56	1062	6.0	-14 28	9.9	10.2	F	1	..	39704b
7	993	5.6	- 7 42	8.2	8.7	F8	4	..	17409b	57	962	6.0	-15 50	8.7	9.5	G5	2	5,1	39704b
8	1088	5.6	-11 36	8.6	9.6	Ko	6	..	24605b	58	1060	6.0	-16 6	8.7	8.7	Ao	5	1,4	12628b
9	1035	5.6	-17 8	9.0	9.4	F5	4	..	12628b	59	1090	6.0	-21 54	8.8	9.8	K2	2	..	12370b
10	1029	5.6	-22 25	9.0	9.1	Fo	2	..	12370b	60	2869	6.0	-24 12	9.3	9.8	Go	3	5,2	44357b
11	2138	5.6	-35 46	8.7	10.3	Ko	3	..	42101b	61	2148	6.0	-33 39	7.86	9.4	K5	5	..	24442b
12	2067	5.6	-36 35	9.1	9.8	F5	2	..	42101b	62	1794	6.0	-42 9	7.6	7.8	Fo	8	..	20648b
13	2068	5.6	-36 40	9.0	10.9	G5	1	..	42101b	63	303	6.0	-76 46	7.0	7.4	F5	7	..	20540b
14	744	5.6	-55 7	7.47	7.6	F2	8	..	20548b	64	169	6.1	+79 7	5.16	5.66	F8	..	3,10	859c
15	786	5.6	-56 21	8.8	9.2	A5	4	..	20548b	65	506	6.1	+64 31	9.4	9.4	Ao	2	..	38907i
16	422	5.6	-62 31	8.6	9.6	Ko	3	..	38371b	66	773	6.1	+61 50	8.9	8.9	B8	3	..	38907i
17	416	5.6	-63 31	9.4	9.8	F5	2	..	38371b	67	1222	6.1	+43 25	9.4	9.5	A2	1	..	38940i
18	329	5.6	-69 50	9.46	9.2	F5	4	..	20540b	68	1084	6.1	+37 38	8.0	8.8	G5	4	..	37365i
19	165	5.6	-78 26	6.19	7.7	Ko	8	2,9	15162b	69	963	6.1	+34 42	8.2	8.2	B8	4	..	37365i
20	977	5.7	+46 44	8.4	9.0	Go	4	..	38940i	70	818	6.1	+30 7	8.56	9.06	F8	3	2,3	38161i
21	1067	5.7	+45 35	8.8	8.8	Ao	3	..	38940i	71	782	6.1	+24 10	8.0	8.3	Fo	3	..	37388i
22	881	5.7	+ 8 31	9.4	9.7	Fo	2	..	38410b	72	721	6.1	+16 38	8.7	9.5	G5	4	..	4420m
23	880	5.7	+ 8 16	8.8	10.0	K5	1	..	38410b	73	861	6.1	+ 6 51	10.4	10.5	A3	2	..	38410b
24	1177	5.7	- 5 4	8.60	9.38	G5	2	..	14664b	74	1022	6.1	-20 13	8.6	10.0	K5	1	..	44357b
25	2085	5.7	-29 21	8.8	10.3	K5	1	..	20533b	75	2484	6.1	-23 21	10.3	9.2	A5	2	..	12370b
26	2144	5.7	-33 0	8.4	9.1	A5	7	..	24442b	76	2073	6.1	-36 42	10.4	10.9	F5	1	..	42101b
27	2102	5.7	-34 38	8.7	10.6	K5	3	..	24442b	77	1809	6.1	-39 20	8.7	9.7	F8	2	..	42101b
28	1704	5.7	-43 22	9.9	10.4	F8	2	..	20648b	78	374	6.1	-66 6	9.0	9.8	G5	3	..	38371b
29	1582	5.7	-49 53	9.34	9.5	Ao	3	..	18482b	79	314	6.1	-68 1	9.5	9.3	B	3	R	38367b
30	389	5.7	-66 59	9.6	10.6	K	1	..	38367b	80	1043	6.2	+51 19	8.0	8.5	F8	5	0,2	37366i
31	127	5.7	-81 52	9.0	9.8	G5	3	..	20557b	81	973	6.2	+33 58	8.5	9.3	G5	4	..	37365i
32	1221	5.8	+43 55	8.0	8.1	A3	3	4,3	37391i	82	907	6.2	+32 56	9.1	9.4	F	2	..	37365i
33	830	5.8	+ 7 24	9.0	10.1	K2	1	..	38410b	83	820	6.2	+30 19	9.4	9.5	A5	2	3,2-	38161i
34	859	5.8	+ 6 27	9.7	10.3	Go	2	..	38410b	84	759	6.2	+28 50	8.8	8.8	Ao	3	2,2	37525i
35	R	5.8	-22 57	9.4	8.9	Go	2	..	12370b	85	796	6.2	+26 21	6.84	7.62	G5	5	5,5	37388i
36	2086	5.8	-29 11	9.6	9.7	F5	3	..	20533b	86	865	6.2	+19 49	9.2	9.2	A	1	..	38213i
37	2224	5.8	-29 59	9.3	10.0	F5	3	..	24442b	87	740	6.2	+11 38	8.5	8.5	Ao	3	..	38167i
38	2070	5.8	-36 43	9.4	10.4	Go	1	..	42101b	88	830	6.2	+ 5 36	8.3	8.8	F8	4	..	37594i
39	417	5.8	-63 17	8.0	8.3	Fo	8	..	38371b	89	856	6.2	+ 4 46	8.5	9.5	Ko	1	..	14663b
40	..	5.8	-71 3	..	..	Pec.	..	R	M	90	1179	6.2	- 5 43	9.2	9.2	B9	3	..	14664b
41	280	5.9	+73 9	5.76	5.76	Ao	..	..	56,79	91	1089	6.2	-12 44	9.9	10.9	Ko	3	..	24605b
42	1128	5.9	+44 27	7.26	7.21	B8	6	0,5	38940i	92	1064	6.2	-13 59	9.5	10.6	K2	1	..	39704b
43	1111	5.9	+41 29	8.7	8.7	Ao	2	..	38088i	93	1062	6.2	-16 4	9.2	9.8	Go	2	..	39704b
44	758	5.9	+15 31	9.4	9.8	F5	1	..	4420m	94	1018	6.2	-18 47	7.8	7.8	Ao	6	..	12370b
45	860	5.9	+ 6 54	7.9	8.9	Ko	6	..	38410b	95	2270	6.2	-25 24	9.8	9.9	F5	1	..	44357b
46	823	5.9	- 1 53	7.80	7.78	B9	4	..	17409b	96	2269	6.2	-25 36	9.6	9.5	Ao	3	..	44357b
47	1178	5.9	- 5 17	8.6	8.6	B9	4	..	17409b	97	1586	6.2	-49 37	9.2	9.5	Fo	3	..	18482b
48	1113	5.9	-10 14	9.7	10.7	Ko	3	..	24605b	98	745	6.2	-57 54	9.2	9.8	A3	2	..	20548b
49	1090	5.9	-11 2	9.0	9.0	Ao	5	..	24605b	99	411	6.2	-61 56	8.3	8.4	B5	6	..	38371b
50	1089	5.9	-11 46	7.00	6.95	B8	6	2,4	18649b	100	101	6.2	-83 9	9.3	9.6	Fo	5	..	20557b

THE HENRY DRAPER CATALOGUE.

33600

5^h 6^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	979	6.3	+46 52	7.6	7.6	B8	4	..	37391i	51	808	6.6	-53 22	9.0	10.1	K2	2	..	39700b
2	1070	6.3	+45 27	9.0	9.3	Fo	3	..	38940i	52	344	6.6	-72 33	7.9	8.9	Ko	6	..	20540b
3	1114	6.3	+41 49	8.5	9.6	K2	1	..	38088i	53	864	6.7	+60 46	9.2	9.2	Ao	1	..	38907i
4	1213	6.3	+40 5	7.32	7.15	B3	8	..	37365i	54	872	6.7	+53 6	6.16	6.16	Ao	8	..	14302i
5	737	6.3	+27 29	9.0	10.0	Ko	2	0,1	37525i	55	1117	6.7	+41 31	8.2	8.3	A2	4	..	37365i
6	849	6.3	+15 0	9.7	10.5	G5	1	..	4420m	56	1093	6.7	+37 59	9.0	9.0	B8	2	..	37365i
7	850	6.3	+14 14	8.3	9.4	K2	4	3,1	4420m	57	738	6.7	+27 40	9.5	10.0	F8	2	..	38921i
8	1165	6.3	-2 37	5.93	6.27	F2	9	..	17409b	58	792	6.7	+21 43	9.4	9.7	F2	1	..	38213i
9	1181	6.3	-5 26	10.4	10.5	A2	1	..	14664b	59	869	6.7	+17 6	8.5	9.6	K2	1	..	37567i
10	1104	6.3	-6 8	8.0	8.0	Ao	6	..	17409b	60	762	6.7	+15 48	8.8	8.9	A3	4	3,2	4420m
11	1091	6.3	-9 31	9.2	9.2	B9	2	..	14664b	61	828	6.7	+13 48	8.7	9.5	G5	4	..	4420m
12	1024	6.3	-20 26	9.9	9.7	Ao	2	..	44357b	62	865	6.7	+6 44	7.89	8.89	Ko	2	..	38167i
13	2244	6.3	-31 28	7.73	7.9	Ao	8	..	24442b	63	1117	6.7	-10 7	9.2	9.2	Ao	2	..	14664b
14	1795	6.3	-42 44	9.0	9.7	Ko	3	..	20648b	64	1092	6.7	-11 58	5.91	7.26	Mb	..	0,7-	56,79
15	423	6.3	-59 36	8.8	8.8	Go	3	..	42691b	65	1034	6.7	-22 9	9.0	8.9	Go	1	..	12370b
16	428	6.3	-65 30	8.2	9.2	Ko	7	..	38371b	66	2491	6.7	-23 42	8.6	8.5	Ao	6	..	12370b
17	315	6.3	-68 33	8.3	8.9	Go	5	..	20540b	67	2045	6.7	-26 2	6.53	8.0	Ko	8	0,8	42783b
18	857	6.4	+59 16	6.36	7.36	Ko	7	2,8	37407i	68	2188	6.7	-32 11	8.0	9.1	K2	4	..	24442b
19	1115	6.4	+41 12	8.5	8.6	A5	2	..	38088i	69	779	6.7	-54 13	9.0	9.5	F5	2	..	39700b
20	822	6.4	+30 54	9.4	9.8	F5	2	..	37525i	70	748	6.7	-57 7	8.2	8.9	Go	6	5,3	20548b
21	835	6.4	+29 14	9.4	9.5	A2	2	0,1	37525i	71	1012	6.8	+35 32	8.0	8.0	Ao	6	..	37365i
22	797	6.4	+26 10	8.4	8.9	F8	3	3,3	38161i	72	967	6.8	+34 38	8.8	9.2	F5	2	..	37365i
23	867	6.4	+17 9	8.5	8.6	A2	3	..	37567i	73	742	6.8	+11 14	8.2	8.5	F2	3	..	38167i
24	725	6.4	+16 34	9.7	9.8	A2	3	..	4420m	74	831	6.8	+7 22	9.0	9.6	Go	2	..	38410b
25	728	6.4	+10 20	8.8	9.6	G5	2	..	38167i	75	997	6.8	-7 56	8.6	9.1	F8	3	..	14664b
26	1090	6.4	-12 38	9.2	9.7	F8	4	..	24605b	76	1094	6.8	-11 26	9.2	9.8	Go	7	..	24605b
27	1084	6.4	-13 8	10.4	10.4	Ao	3	..	24605b	77	963	6.8	-15 50	9.2	10.0	G5	2	..	39704b
28	1025	6.4	-20 52	7.26	7.0	B9	7	..	12370b	78	1115	6.8	-19 17	8.6	9.7	F5	4	..	12370b
29	2151	6.4	-33 54	9.1	9.7	Fo	6	..	24442b	79	2229	6.8	-30 12	9.0	10.0	Fo	3	..	24442b
30	1909	6.4	-38 31	9.0	10.3	F8	1	..	42101b	80	1765	6.8	-40 41	7.4	8.2	K2	7	..	42101b
31	391	6.4	-67 31	10.1	10.1	Ao	2	..	38367i	81	1834	6.8	-45 0	8.28	8.8	A5	7	..	18482b
32	1091	6.5	+37 14	6.52	7.02	F8	8	..	37365i	82	1833	6.8	-45 31	8.5	10.0	K2	2	..	18482b
33	741	6.5	+11 24	8.7	8.8	A2	2	..	38167i	83	664	6.8	-52 4	8.6	9.5	F5	3	..	39700b
34	833	6.5	+5 53	8.7	8.8	A3	4	..	14663b	84	420	6.8	-63 31	5.24	7.3	Mb	..	5,9	56,121
35	834	6.5	+5 18	8.3	9.3	Ko	3	..	37594i	85	383	6.9	+66 34	8.9	9.9	Ko	1	5,1	38112i
36	858	6.5	+4 18	7.5	8.1	Go	6	..	37594i	86	1225	6.9	+43 48	8.9	9.7	G5	1	..	38940i
37	824	6.5	-1 17	10.0	10.0	A	1	..	12391b	87	1065	6.9	+38 54	8.6	8.9	Fo	4	..	37365i
38	2274	6.5	-25 20	10.1	9.8	F2	1	..	44357b	88	1014	6.9	+35 35	8.6	8.6	A	2	..	37365i
39	2144	6.5	-35 26	9.0	10.3	G5	3	..	42101b	89	787	6.9	+24 18	7.8	8.2	F5	4	..	37388i
40	425	6.5	-62 53	8.8	9.1	Fo	4	..	38371b	90	886	6.9	+9 1	8.2	8.2	B9	4	..	38167i
41	1063	6.6	+38 22	4.78	4.86	A3	..	1,8 R	56,79	91	861	6.9	+4 8	8.4	8.7	Fo	2	..	37594i
42	966	6.6	+34 11	8.6	8.9	Fo	4	..	37365i	92	978	6.9	+0 30	8.7	9.0	F2	3	..	37594i
43	977	6.6	+33 12	8.1	8.4	F2	2	..	37365i	93	1120	6.9	-10 30	8.0	8.4	F5	9	..	24605b
44	761	6.6	+15 5	9.09	9.65	Go	3	..	4420m	94	1119	6.9	-10 54	8.4	9.4	Ko	8	..	24605b
45	864	6.6	+6 43	7.74	8.74	Ko	5	..	38167i	95	1093	6.9	-12 51	10.4	11.0	Go	2	..	24605b
46	975	6.6	+0 55	6.07	6.49	F5	8	..	37594i	96	965	6.9	-15 10	8.6	8.7	A5	5	..	39704b
47	974	6.6	+0 24	6.58	6.56	B9	8	..	37594i	97	1041	6.9	-17 10	9.0	10.0	Ko	2	..	39704b
48	1091	6.6	-12 56	9.7	9.8	A2	5	..	24605b	98	2885	6.9	-24 35	8.6	8.7	Ao	4	..	12370b
49	1893	6.6	-44 28	7.3	8.5	F2	8	..	18482b	99	1715	6.9	-43 30	9.9	10.6	Ao	3	..	20648b
50	1590	6.6	-49 6	7.34	8.3	Ko	7	..	18482b	100	426	6.9	-62 10	8.6	9.6	Ko	2	..	38371b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

33700

5^h 6^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	166	m. 6.9	° -78 19	7.7	8.7	Ko	4	2,3	15162b	51	877	m. 7.3	° -0 5	7.83	8.83	Ko	4	..	14663b
2	1215	7.0	+39 51	9.5	9.8	F	2	..	37365i	52	878	7.3	-0 36	9.2	9.2	Ao	4	..	14663b
3	1094	7.0	+37 48	9.4	9.8	F5	2	..	37365i	53	827	7.3	-1 55	8.92	9.00	A3	2	..	12391b
4	1047	7.0	+36 55	6.78	6.78	Ao	8	..	37365i	54	1169	7.3	-2 18	9.7	10.1	F5	1	..	12391b
5	825	7.0	+30 51	8.7	9.7	Ko	4	0,3	38161i	55	1098	7.3	-11 4	7.8	7.8	Ao	6	..	14664b
6	837	7.0	+29 52	9.1	9.1	B9	2	0,2	38921i	56	1099	7.3	-11 22	9.2	10.4	K5	1	..	24605b
7	872	7.0	+18 3	8.5	9.3	G5	2	..	37567i	57	1028	7.3	-20 16	9.2	9.8	Ko	1	..	44357b
8	829	7.0	+13 16	8.7	9.7	Ko	2	..	4420m	58	2895	7.3	-24 41	9.0	9.8	Ko	2	0,2-	44357b
9	2887	7.0	-24 28	7.9	8.9	G5	5	..	12370b	59	2103	7.3	-29 43	7.9	8.6	Fo	7	..	24442b
10	2100	7.0	-29 52	8.74	8.8	F2	5	..	24442b	60	1739	7.3	-41 9	9.4	10.3	Ko	1	..	42101b
11	2192	7.0	-32 21	9.0	9.4	F8	3	..	24442b	61	1709	7.3	-47 33	9.2	10.3	G5	1	..	18482b
12	2193	7.0	-32 57	8.0	8.8	Ko	5	..	24442b	62	783	7.3	-54 22	8.4	9.2	F8	4	..	39700b
13	1387	7.0	-51 11	9.0	8.9	Ao	5	..	39700b	63	298	7.3	-75 3	8.88	9.0	Go	6	..	15162b
14	809	7.0	-53 50	9.6	10.4	G5	1	..	39700b	64	1218	7.4	+39 12	9.1	9.1	Ao	2	..	37365i
15	781	7.0	-54 15	10.3	10.3	A	1	..	39700b	65	864	7.4	+4 40	9.0	9.0	B8	3	..	37594i
16	780	7.0	-54 41	9.7	9.8	A5	2	..	39700b	66	1037	7.4	-3 8	8.6	8.6	B9	2	..	17409b
17	749	7.0	-55 7	9.54	9.2	Ao	3	..	20548b	67	1066	7.4	-16 0	9.2	9.6	F5	2	..	39704b
18	412	7.0	-61 40	9.1	10.1	K	1	..	38371b	68	2122	7.4	-27 4	8.6	9.2	Ko	3	..	20533b
19	886	7.1	+31 21	8.6	8.7	A3	4	0,3	37525i	69	2163	7.4	-33 48	9.6	10.5	F5	3	..	24442b
20	731	7.1	+10 18	8.37	9.15	G5	3	..	38167i	70	2154	7.4	-35 2	7.24	8.2	K2	8	..	24442b
21	866	7.1	+6 24	8.8	9.3	F8	2	..	38410b	71	2066	7.4	-37 57	9.0	10.4	Go	2	..	42101b
22	867	7.1	+6 7	10.4	10.4	Ao	1	..	38410b	72	1219	7.5	+39 16	8.0	8.8	G5	2	..	37365i
23	932	7.1	+1 13	8.94	9.94	Ko	1	..	14663b	73	888	7.5	+31 28	8.8	9.9	K2	2	0,1	37525i
24	980	7.1	+0 46	9.4	9.7	F2	2	..	14663b	74	732	7.5	+16 46	8.7	9.8	K2	2	..	4420m
25	1094	7.1	-9 12	8.0	9.0	Ko	4	..	14664b	75	763	7.5	+9 59	8.47	9.47	Ko	4	..	38410b
26	1037	7.1	-22 17	8.6	8.8	G5	3	..	12370b	76	762	7.5	+9 53	9.4	10.5	K2	1	..	38410b
27	2281	7.1	-25 33	10.1	9.9	Go	1	..	44357b	77	889	7.5	+8 22	8.5	8.5	Ao	3	..	38167i
28	2117	7.1	-34 32	10.0	10.9	G5	2	..	24442b	78	842	7.5	+5 9	9.16	9.16	Ao	4	..	14663b
29	364	7.1	-70 49	9.0	10.0	Ko	2	..	20540b	79	879	7.5	-0 2	7.43	7.85	F5	6	3,5	17409b
30	509	7.2	+64 41	9.5	9.8	F2	2	..	38907i	80	1067	7.5	-14 12	9.0	9.8	G5	2	..	39704b
31	1113	7.2	+48 4	9.4	9.4	Ao	3	..	38125i	81	1068	7.5	-14 30	9.7	10.3	Go	2	..	39704b
32	981	7.2	+46 17	8.8	9.6	G5	2	..	38940i	82	1117	7.5	-19 8	9.2	9.7	Ao	3	..	12370b
33	1215	7.2	+40 8	7.42	8.42	Ko	6	..	37365i	83	378	7.6	+69 2	8.8	9.8	Ko	1	..	38112i
34	831	7.2	+13 49	8.7	9.7	Ko	1	..	4420m	84	1241	7.6	+48 15	8.6	9.6	Ko	1	..	38125i
35	1095	7.2	-9 3	8.6	9.6	Ko	2	..	14664b	85	1212	7.6	+42 18	8.0	8.3	F2	2	..	38088i
36	2047	7.2	-26 49	7.8	8.9	Ko	4	..	20533b	86	826	7.6	+30 39	9.5	9.5	Ao	2	..	37525i
37	2118	7.2	-27 11	8.1	9.2	Ko	3	..	20533b	87	761	7.6	+28 7	9.0	9.8	G5	2	..	38921i
38	2256	7.2	-31 2	9.4	10.0	Fo	2	..	24442b	88	829	7.6	-1 40	9.4	10.4	K	1	..	12391b
39	2194	7.2	-32 44	8.7	10.0	K5	3	..	24442b	89	1086	7.6	-13 18	9.2	9.2	Ao	3	..	24605b
40	2080	7.2	-36 24	7.8	8.2	B9	7	..	42101b	90	1067	7.6	-16 51	9.5	9.8	F	2	E	39704b
41	1738	7.2	-41 43	9.1	9.2	F5	3	..	42101b	91	2197	7.6	-32 2	8.4	9.4	Ko	3	..	24442b
42	1838	7.2	-44 59	9.08	9.4	B9	5	..	18482b	92	2067	7.6	-37 1	9.6	11.2	Go	1	..	42101b
43	1713	7.2	-46 48	9.5	10.0	F5	2	..	18482b	93	1841	7.6	-44 59	9.2	10.6	K2	1	R	18482b
44	1594	7.2	-49 28	9.3	9.5	A5	3	..	18482b	94	1711	7.6	-47 8	9.0	9.4	F5	4	..	18482b
45	366	7.2	-70 44	9.1	10.1	Ko	1	..	20540b	95	794	7.6	-56 10	9.0	9.5	F8	3	..	20548b
46	347	7.2	-72 14	8.6	9.6	Ko	2	..	20540b	96	385	7.6	-60 18	9.1	9.7	Go	2	..	38371b
47	297	7.2	-75 9	8.5	9.3	G5	5	..	15162b	97	1330	7.7	+49 5	8.9	9.7	G5	1	..	38125i
48	376	7.3	+68 52	8.6	9.4	G5	2	..	38112i	98	1117	7.7	+47 4	6.97	7.75	G5	4	..	37391i
49	1049	7.3	+36 49	7.7	7.7	B8	6	..	37365i	99	1141	7.7	+44 22	9.5	9.6	A2	1	..	38940i
50	832	7.3	+13 52	8.7	9.7	Ko	2	..	4420m	100	891	7.7	+31 52	9.4	9.7	F	2	..	37525i

THE HENRY DRAPER CATALOGUE.

33800

5^h 7^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1068	m. 7.7	° - 4 48	9.07	9.07	Ao	2	..	14664b	51	786	m. 8.0	° - 54 29	8.7	9.6	Ko	2	..	39700b
2	1095	7.7	- 11 59	4.54	4.40	B8	..	R	56,79	52	1047	8.1	+ 51 52	8.0	8.0	B8	4	..	37366i
3	968	7.7	- 15 11	9.5	9.5	B9	3	..	39704b	53	985	8.1	+ 46 18	7.7	7.7	B9	4	1,3	38940i
4	1045	7.7	- 17 22	9.2	9.2	Ao	3	..	45972b	54	894	8.1	+ 31 36	8.6	8.6	Ao	3	0,2	37525i
5	2288	7.7	- 24 59	8.97	10.3	K2	1	..	42783b	55	855	8.1	+ 22 36	9.8	10.4	Go	2	..	38213i
6	2106	7.7	- 29 41	8.4	9.7	G5	4	..	24442b	56	888	8.1	+ 2 45	4.64	5.64	Ko	..	0, R	56,79
7	2232	7.7	- 30 21	7.06	8.1	F5	9	..	24442b	57	1046	8.1	- 17 34	8.6	8.6	Ao	4	0,3	12370b
8	2262	7.7	- 31 0	9.6	10.0	A5	2	..	24442b	58	1669	8.1	- 48 35	7.7	7.6	A2	8	..	18482b
9	1802	7.7	- 42 32	8.6	9.4	Ko	4	..	20648b	59	313	8.2	+ 69 19	9.4	10.4	Ko	1	..	38112i
10	1718	7.7	- 43 26	9.0	10.6	G5	2	..	20648b	60	1220	8.2	+ 42 49	8.6	9.1	F8	2	..	38940i
11	1905	7.7	- 44 42	8.6	10.0	G5	2	..	18482b	61	1225	8.2	+ 40 1	var.	var.	Ma	2	R	37365i
12	1718	7.7	- 46 22	9.5	10.0	G	1	..	18482b	62	895	8.2	+ 31 18	6.78	7.78	Ko	5	..	36997i
13	784	7.7	- 54 26	9.1	10.1	Ko	2	..	39700b	63	829	8.2	+ 30 34	7.9	7.9	Ao	4	..	36997i
14	867	7.8	+ 60 10	8.66	8.94	Fo	2	..	38167i	64	796	8.2	+ 21 7	7.7	7.8	A2	5	..	37388i
15	1124	7.8	+ 41 14	8.1	9.1	Ko	2	..	38088i	65	847	8.2	+ 5 40	8.3	9.1	G5	3	..	38167i
16	1071	7.8	+ 38 7	8.7	8.6	B5	2	..	37365i	66	812	8.2	+ 3 34	8.3	8.9	Go	3	..	37594i
17	914	7.8	+ 32 59	9.0	9.0	Ao	3	0,2	38921i	67	986	8.2	+ 0 25	9.4	10.2	G5	1	..	14663b
18	733	7.8	+ 10 39	9.2	9.2	Ao	3	..	38167i	68	1040	8.2	- 3 4	9.2	10.2	Ko	1	..	12391b
19	830	7.8	- 1 40	9.4	9.4	Ao	2	..	12391b	69	1099	8.2	- 9 4	8.5	9.5	Ko	2	..	14664b
20	1096	7.8	- 12 32	9.2	10.0	G5	2	..	24605b	70	1090	8.2	- 13 16	9.2	9.8	Go	4	..	24605b
21	969	7.8	- 15 44	9.2	9.8	Go	3	..	39704b	71	2237	8.2	- 30 35	8.6	10.0	Ko	2	..	24442b
22	2120	7.8	- 34 0	8.4	9.1	G5	7	..	24442b	72	2071	8.2	- 37 31	6.58	8.6	K5	8	..	42101b
23	1908	7.8	- 44 42	8.6	10.0	Ko	2	..	18482b	73	1393	8.2	- 51 25	8.5	9.2	G5	3	..	39700b
24	665	7.8	- 52 12	8.7	9.5	Fo	2	..	39700b	74	669	8.2	- 52 27	9.4	9.8	F5	1	..	39700b
25	666	7.8	- 52 46	8.0	7.9	Fo	6	..	39700b	75	286	8.2	- 73 10	6.25	5.9	Ao	10	..	20540b
26	1228	7.9	+ 43 43	8.9	9.9	Ko	1	..	38940i	76	288	8.2	- 73 43	8.1	8.6	F8	6	..	15162b
27	1215	7.9	+ 42 22	7.9	8.7	G5	1	..	38088i	77	1331	8.3	+ 49 26	var.	var.	Mb	..	R	M
28	1072	7.9	+ 38 8	9.1	9.1	Ao	2	..	37365i	78	1146	8.3	+ 44 14	8.0	8.4	F5	4	..	37391i
29	827	7.9	+ 30 17	7.21	7.49	Fo	5	..	36997i	79	1022	8.3	+ 35 15	8.2	9.0	G5	4	..	37365i
30	839	7.9	+ 7 21	9.0	9.3	Fo	2	..	38410b	80	856	8.3	+ 22 34	8.7	9.5	G5	1	..	38213i
31	882	7.9	- 0 13	8.07	8.07	Ao	5	0,4	17409b	81	867	8.3	+ 4 44	8.5	9.6	K2	2	..	14663b
32	1039	7.9	- 3 54	9.7	9.7	Ao	2	..	12391b	82	889	8.3	+ 2 31	9.4	9.9	F8	2	..	14663b
33	1109	7.9	- 6 10	6.01	6.79	G5	8	..	17409b	83	938	8.3	+ 1 51	6.25	6.31	A2	8	R	37594i
34	2904	7.9	- 24 38	9.0	9.5	Go	3	..	12370b	84	1098	8.3	- 12 17	8.6	8.7	A5	6	..	24605b
35	2090	7.9	- 36 36	8.0	10.0	K2	3	..	42101b	85	1070	8.3	- 14 41	9.1	9.1	Ao	4	..	39704b
36	1773	7.9	- 40 0	10.0	9.7	F5	2	..	42101b	86	1120	8.3	- 19 30	9.1	9.4	Ko	2	..	12370b
37	1720	7.9	- 43 36	9.1	10.0	F8	3	..	20648b	87	2296	8.3	- 25 2	8.10	8.7	Go	6	2,5	42783b
38	811	7.9	- 53 39	8.4	8.9	Fo	4	..	39700b	88	2064	8.3	- 26 40	7.9	8.6	Go	5	0,4	42783b
39	298	8.0	+ 71 22	9.2	9.5	F	1	..	38112i	89	2124	8.3	- 34 16	9.0	9.7	F2	4	..	24442b
40	774	8.0	+ 61 8	8.9	10.0	K2	1	..	38907i	90	2094	8.3	- 36 30	8.4	9.1	F5	5	..	42101b
41	1136	8.0	+ 50 27	7.42	7.56	A5	4	2,3	37366i	91	2093	8.3	- 36 50	9.4	10.9	G5	1	..	42101b
42	1143	8.0	+ 44 35	8.6	9.6	Ko	1	..	38940i	92	1844	8.3	- 45 42	var.	var.	Mb	1	R	18482b
43	1021	8.0	+ 36 1	8.8	9.1	Fo	4	..	37365i	93	1671	8.3	- 48 38	var.	var.	Md	..	R	M
44	971	8.0	- 15 5	7.40	8.18	G5	7	0,4 R	39704b	94	416	8.3	- 64 4	9.3	10.3	Ko	1	..	38371b
45	2060	8.0	- 26 42	8.0	9.2	Ko	2	..	42783b	95	1221	8.4	+ 42 26	8.0	9.0	Ko	1	..	38088i
46	2059	8.0	- 26 46	8.8	8.6	Ao	4	0,4	12370b	96	804	8.4	+ 25 49	7.8	7.9	A2	3	2,2	37388i
47	2201	8.0	- 32 28	8.7	8.8	Fo	4	..	24442b	97	746	8.4	+ 11 22	8.4	8.7	Fo	2	..	38167i
48	2092	8.0	- 36 48	9.8	10.9	F5	1	..	42101b	98	768	8.4	+ 9 36	8.5	9.5	Ko	3	..	38167i
49	1829	8.0	- 39 3	8.0	9.7	K2	3	..	42101b	99	868	8.4	+ 4 6	8.2	8.2	B9	5	..	14663b
50	788	8.0	- 54 24	9.3	10.3	Ko	1	..	39700b	100									

ANNALS OF HARVARD COLLEGE OBSERVATORY.

33900

5^h 8^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	813	8.4	+ 3 36	9.4	9.4	Ao	2	..	14663b	51	1832	8.7	-39 6	9.0	11.2	K5	1	..	42101b
2	1191	8.4	- 5 6	9.40	9.40	Ao	2	..	14664b	52	1781	8.7	-40 28	9.8	9.7	Ko	2	..	42101b
3	1190	8.4	- 5 12	9.2	9.2	Ao	2	..	14664b	53	1810	8.7	-42 17	9.3	10.3	Ko	2	..	20648b
4	1072	8.4	-16 19	3.30	3.30	Aop	..	R	6082c	54	755	8.7	-55 13	9.4	10.4	Ko	1	..	39700b
5	1027	8.4	-18 50	9.0	9.3	Fo	3	..	12370b	55	863	8.8	+59 50	8.9	9.2	F2	3	..	38907i
6	2298	8.4	-25 29	9.0	9.8	Ko	2	0,1	42783b	56	976	8.8	+55 20	9.2	10.2	Ko	1	..	38970i
7	2176	8.4	-33 24	9.0	9.7	G5	3	..	24442b	57	879	8.8	+53 13	9.37	9.37	Ao	1	..	38970i
8	1845	8.4	-45 4	9.72	10.3	Ko	1	..	18482b	58	1080	8.8	+38 15	9.4	9.4	Ao	2	..	37365i
9	738	8.5	+62 40	9.2	10.0	G5	2	..	38907i	59	922	8.8	+32 35	5.14	5.20	A2	..	1,10	56,79
10	1048	8.5	+51 33	9.2	10.2	Ko	2	..	38125i	60	942	8.8	+ 1 22	9.4	10.5	K2	1	..	14663b
11	1127	8.5	+41 45	8.1	8.2	A2	4	..	38940i	61	941	8.8	+ 1 5	10.4	11.5	K2	1	..	14663b
12	898	8.5	+31 38	8.2	8.2	B8	4	1,2	37525i	62	1181	8.8	- 2 54	8.6	8.9	Fo	5	0,2	12391b
13	832	8.5	+30 57	8.0	8.0	Ao	3	..	36997i	63	1105	8.8	-11 26	8.6	8.7	A2	5	..	14664b
14	841	8.5	+ 7 18	8.3	9.3	Ko	3	..	38167i	64	1093	8.8	-13 3	9.5	9.6	A5	3	..	39704b
15	815	8.5	+ 3 21	9.0	10.2	K5	1	..	14663b	65	1051	8.8	-17 43	8.2	9.3	K2	1	..	12370b
16	892	8.5	+ 2 16	9.0	10.0	Ko	1	..	14663b	66	2134	8.8	-27 48	8.6	8.7	Go	2	..	42783b
17	1176	8.5	- 2 44	9.7	9.7	Ao	3	..	12391b	67	2277	8.8	-31 25	8.8	9.7	Go	3	..	24442b
18	1073	8.5	- 4 47	8.0	8.0	Ao	6	..	17409b	68	1726	8.8	-43 0	10.1	10.9	G	1	..	20648b
19	1073	8.5	-15 59	8.2	9.0	G5	4	..	39704b	69	756	8.8	-55 38	8.4	8.9	F5	4	..	20548b
20	1753	8.5	-41 37	9.0	10.6	Ko	1	..	20648b	70	321	8.8	-68 36	9.2	9.5	F2	2	..	20540b
21	1913	8.5	-44 4	7.7	9.7	K2	3	..	18482b	71	139	8.9	+83 19	9.2	9.8	Go	2	..	38330i
22	430	8.5	-62 41	9.1	9.5	F5	3	..	38371b	72	180	8.9	+81 16	9.4	9.4	Ao	2	..	37558i
23	315	8.5	-71 24	8.2	9.2	Ko	7	..	20540b	73	874	8.9	+54 4	7.81	8.81	Ko	3	0,2-	37366i
24	870	8.6	+60 3	7.21	7.63	F5	5	3,7	36654i	74	893	8.9	+ 8 34	9.0	9.1	A2	3	..	38410b
25	862	8.6	+59 22	9.4	9.5	A3	2	..	38907i	75	1182	8.9	- 2 6	9.2	9.2	Ao	2	..	12391b
26	735	8.6	+16 34	8.5	9.6	K2	3	0,2-	4420m	76	1197	8.9	- 5 19	9.2	9.8	Go	3	..	14664b
27	747	8.6	+11 58	7.8	8.9	K2	2	..	37567i	77	1073	8.9	-14 45	9.2	9.6	F5	3	..	39704b
28	1042	8.6	- 3 45	7.6	7.6	B8	8	..	17409b	78	2915	8.9	-24 4	8.6	9.5	Ko	3	..	12370b
29	1125	8.6	-10 45	9.2	9.8	Go	4	..	39704b	79	2138	8.9	-27 17	7.50	8.4	Ko	4	..	42783b
30	973	8.6	-15 1	9.21	9.99	G5	1	..	39704b	80	2137	8.9	-27 18	7.06	8.3	K2	5	..	42783b
31	1035	8.6	-20 15	9.0	9.2	F2	3	..	12370b	81	1835	8.9	-39 11	8.0	9.7	K2	3	..	42101b
32	1034	8.6	-20 43	8.6	9.2	Fo	2	..	44357b	82	1754	8.9	-41 47	7.4	7.8	Ko	8	..	20648b
33	1041	8.6	-22 38	8.0	8.5	A5	5	..	12370b	83	474	8.9	-58 36	8.4	8.7	Fo	5	0,3	20548b
34	2067	8.6	-26 12	9.6	9.5	Ko	2	..	12370b	84	389	8.9	-60 34	8.3	10.1	Ma	2	..	38371b
35	2241	8.6	-30 6	8.09	8.8	Ao	7	..	24442b	85	435	8.9	-65 15	8.9	9.5	Go	4	..	38371b
36	2180	8.6	-33 31	9.8	10.6	K2	2	..	24442b	86	392	8.9	-67 17	9.3	9.8	F8	3	..	38367b
37	2165	8.6	-35 45	9.3	10.3	A3	2	R	42101b	87	59	8.9	-85 40	9.1	10.1	Ko	4	..	15145b
38	1780	8.6	-40 57	10.7	9.7	F5	2	..	42101b	88	989	9.0	+46 19	6.94	6.82	B5	5	R	38940i
39	1724	8.6	-43 0	9.2	10.3	Ko	3	..	20648b	89	1109	9.0	+37 17	9.4	9.4	Ao	2	..	37365i
40	220	8.7	+75 5	7.97	8.47	F8	4	3,4	37343i	90	901	9.0	+31 41	8.8	8.8	A	1	R	37525i
41	878	8.7	+53 22	8.15	9.15	Ko	2	..	38970i	91	773	9.0	+ 9 22	9.0	9.1	A2	2	..	38167i
42	983	8.7	+33 18	9.1	10.3	K5	..	..	M	92	895	9.0	+ 9 0	8.3	8.7	F5	3	..	38167i
43	835	8.7	+30 28	9.0	9.0	Ao	3	1,3	38167i	93	1198	9.0	- 5 0	8.75	9.53	G5	2	..	14664b
44	748	8.7	+11 22	8.5	8.5	Ao	2	..	38167i	94	1112	9.0	- 6 51	8.0	8.0	B8	6	..	17409b
45	852	8.7	+ 5 49	9.0	9.6	Go	2	..	38410b	95	1031	9.0	-18 41	8.0	8.6	Go	6	..	12370b
46	988	8.7	+ 0 26	6.54	7.61	K2	5	..	37594i	96	2917	9.0	-24 40	9.8	9.8	Go	2	..	12370b
47	834	8.7	- 1 0	8.7	8.8	A5	3	5,2	17409b	97	2072	9.0	-26 8	8.2	9.8	Ma	2	..	12370b
48	1059	8.7	- 8 16	6.16	6.16	Ao	6	2,7	14664b	98	2278	9.0	-31 57	10.1	10.0	A3	2	..	24442b
49	1092	8.7	-13 3	4.46	4.41	B8	..	0,R	56,79	99	2128	9.0	-34 36	8.4	9.8	G5	5	..	24442b
50	1071	8.7	-14 33	9.2	10.2	Ko	1	..	39704b	100	791	9.0	-54 0	8.5	9.5	Ko	3	..	39700b

THE HENRY DRAPER CATALOGUE.

34000

5^h 9^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	415	m. 9.0	° 43	8.6	9.3	F5	3	..	38371b	51	838	m. 9.5	° 22	8.0	8.1	A2	5	..	36997i
2	426	9.0	-63 54	7.74	7.8	Fo	8	..	38371b	52	847	9.5	+29 21	9.0	9.8	G5	3	0,1	37525i
3	378	9.0	-66 18	9.7	9.8	A2	3	..	38371b	53	864	9.5	+22 10	6.16	6.16	Ao	7	..	37388i
4	299	9.1	+71 37	6.76	7.54	G5	5	..	37343i	54	857	9.5	+14 56	7.29	7.27	B9	6	..	37567i
5	468	9.1	+65 54	9.2	10.2	Ko	1	..	38952i	55	890	9.5	-0 41	6.89	8.24	Mb	5	0,5	37594i
6	516	9.1	+64 45	9.2	9.2	Ao	3	2,2	38907i	56	976	9.5	-15 10	9.7	9.8	A3	1	..	39704b
7	1227	9.1	+42 40	7.76	7.76	Ao	3	..	37391i	57	2923	9.5	-24 56	8.85	9.5	F8	3	..	12370b
8	1111	9.1	+37 4	9.4	9.4	A	2	..	37365i	58	2311	9.5	-25 27	9.3	9.5	Go	3	..	12370b
9	1060	9.1	+36 37	9.0	9.0	B9	4	..	37365i	59	1933	9.5	-38 5	9.4	9.7	Go	1	..	42101b
10	977	9.1	+34 29	8.7	9.7	Ko	2	..	37365i	60	1610	9.5	-49 11	7.9	7.9	Ao	8	R	18482b
11	1094	9.1	-13 47	9.2	10.2	Ko	1	..	39704b	61	300	9.6	+71 7	8.08	8.86	G5	2	..	38112i
12	1054	9.1	-17 13	7.49	7.99	F8	7	..	12370b	62	905	9.6	+31 41	8.4	8.4	B9	4	1,3	37525i
13	1036	9.1	-20 39	8.1	9.5	K2	3	..	12370b	63	801	9.6	+21 35	8.8	9.6	G5	2	..	37388i
14	2121	9.1	-29 44	8.4	10.3	Ko	2	..	24442b	64	778	9.6	+9 22	9.4	9.8	F5	2	..	38167i
15	416	9.1	-61 51	9.0	9.6	F8	2	..	38371b	65	846	9.6	+7 27	8.8	8.9	A2	2	..	38167i
16	418	9.1	-64 30	9.0	10.1	K2	3	..	38371b	66	873	9.6	+6 9	8.3	9.3	Ko	2	..	38167i
17	60	9.1	-84 0	9.2	9.5	Fo	4	..	20557b	67	1104	9.6	-12 25	9.2	9.7	F8	2	..	39704b
18	379	9.2	+67 53	7.38	7.44	A2	5	R	36654i	68	1097	9.6	-13 10	8.0	9.0	Ko	5	..	39704b
19	882	9.2	+53 28	var.	var.	Md	..	R	M	69	977	9.6	-15 46	8.6	9.8	K5	3	..	39704b
20	800	9.2	+21 22	9.4	9.7	F	2	..	37388i	70	1079	9.6	-16 15	9.2	9.5	Fo	3	..	39704b
21	752	9.2	+12 25	7.5	7.5	Ao	6	..	37567i	71	1080	9.6	-16 47	8.0	9.0	Ko	4	..	18649b
22	1129	9.2	-10 31	9.2	10.3	K2	2	..	39704b	72	2081	9.6	-37 32	9.0	9.4	F5	4	..	42101b
23	1043	9.2	-22 9	8.7	9.1	Go	2	..	12370b	73	1611	9.6	-49 10	9.2	9.2	Ao	3	..	18482b
24	1784	9.2	-40 46	10.4	10.1	F5	1	..	42101b	74	437	9.6	-65 10	7.42	9.8	Ko	3	..	38371b
25	1728	9.2	-47 24	8.4	8.2	F2	7	..	18482b	75	878	9.7	+54 18	8.6	8.6	Ao	4	0,4	37366i
26	322	9.2	-68 53	Cl.	Cl.	Con.	4	R	20540b	76	1334	9.7	+49 14	8.6	9.6	Ko	2	..	38125i
27	518	9.3	+64 27	9.2	9.6	F5	2	..	38907i	77	1027	9.7	+35 13	8.87	8.82	B8	4	R	37365i
28	977	9.3	+55 24	7.41	7.41	Ao	6	0,6	37366i	78	980	9.7	+34 12	5.81	5.57	Bop	..	0,5 R	56,79
29	1077	9.3	+45 54	0.21	0.77	Go	..	R	28,197	79	839	9.7	+30 59	9.5	9.5	Ao	2	..	37525i
30	978	9.3	+34 18	7.8	8.3	F8	6	..	37365i	80	769	9.7	+15 31	8.8	8.8	Ao	3	..	37567i
31	876	9.3	+19 56	7.70	8.26	Go	4	..	37388i	81	900	9.7	+8 18	7.19	7.47	Fo	8	..	38167i
32	736	9.3	+16 39	9.2	9.5	Fo	3	..	37567i	82	..	9.7	+6 3	..	..	A2	2	..	38410b
33	754	9.3	+12 54	8.5	9.3	G5	2	..	37567i	83	1077	9.7	-4 7	8.6	9.6	Ko	2	..	14664b
34	741	9.3	+10 46	9.0	9.0	Ao	2	..	38167i	84	1010	9.7	-7 49	8.6	9.0	F5	4	..	14664b
35	895	9.3	+2 27	9.4	9.4	Ao	4	..	14663b	85	1063	9.7	-8 19	0.34	0.29	B8p	..	R	28,197
36	2124	9.3	-29 22	8.4	9.1	Ao	4	..	24442b	86	1131	9.7	-10 33	7.56	7.84	Fo	6	..	14664b
37	390	9.3	-60 25	9.1	9.6	G5	2	..	38371b	87	2539	9.7	-23 6	7.43	8.2	G5	7	..	12370b
38	324	9.3	-68 1	9.6	10.4	G5	1	..	38367b	88	2213	9.7	-32 1	7.67	7.7	F2	7	..	24442b
39	323	9.3	-68 53	Neb.	Neb.	Con.	2	R	20540b	89	1788	9.7	-40 33	9.4	9.8	F8	2	..	42101b
40	1228	9.4	+42 33	7.9	8.2	Fo	5	..	38940i	90	1817	9.7	-42 31	8.7	9.2	F5	5	..	20648b
41	1062	9.4	+36 51	9.4	9.4	Ao	4	..	37365i	91	758	9.7	-57 44	8.8	9.0	Ko	3	..	20548b
42	979	9.4	+34 11	9.4	9.5	A5	2	..	37365i	92	1231	9.8	+42 33	8.0	9.0	Ko	1	E	38088i
43	877	9.4	+5 3	5.82	6.82	Ko	7	..	37594i	93	1087	9.8	+38 56	8.6	8.7	A2	4	..	37365i
44	1201	9.4	-5 23	8.6	9.7	K2	2	..	14664b	94	1066	9.8	+36 58	9.0	9.0	Ao	4	..	37365i
45	1074	9.4	-14 43	6.26	6.60	F2	7	0,7	18649b	95	1028	9.8	+35 58	7.13	7.19	A2	8	..	37365i
46	1931	9.4	-38 3	9.4	10.0	Go	1	..	42101b	96	807	9.8	+25 51	7.90	7.90	Ao	4	0,3	37388i
47	756	9.4	-57 18	9.1	9.5	Fo	4	..	20548b	97	856	9.8	+5 15	9.0	10.0	Ko	2	..	14663b
48	435	9.4	-62 48	9.7	10.3	Go	1	..	38371b	98	879	9.8	+4 47	8.8	8.8	B8	3	..	37594i
49	419	9.4	-64 40	10.0	10.1	A5	2	..	38371b	99	825	9.8	+3 23	9.4	10.0	Go	2	..	14663b
50	1231	9.5	+39 45	8.8	9.8	Ko	2	R	37365i	100	992	9.8	+0 19	9.4	9.4	Ao	3	..	14663b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

34100

5^h 9^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	978	9.8	-15 57	8.0	8.8	G5	4	..	18649b	51	1203	10.1	- 5 50	9.2	10.4	K5	1	..	14664b
2	1040	9.8	-20 19	9.0	9.1	Fo	3	..	12370b	52	1013	10.1	- 7 49	8.6	9.1	F8	1	..	14664b
3	2287	9.8	-31 20	8.8	10.3	Ko	2	..	24442b	53	1035	10.1	-18 31	7.6	8.6	Ko	4	..	12370b
4	2214	9.8	-32 11	7.18	7.2	A3	9	..	24442b	54	2545	10.1	-23 19	10.3	9.4	A2	1	..	44357b
5	1934	9.8	-38 38	8.7	9.7	Go	2	..	42101b	55	795	10.1	-54 16	9.2	10.1	Go	1	..	39700b
6	1818	9.8	-42 7	9.0	9.7	Ko	3	..	20648b	56	763	10.1	-55 56	9.0	9.5	Go	3	..	20548b
7	761	9.8	-55 8	9.3	10.1	G5	1	..	39700b	57	420	10.1	-64 25	9.8	9.8	Ao	3	..	38371b
8	332	9.8	-68 58	Cl.	Cl.	Con.	2	R	20540b	58	380	10.2	+68 30	8.6	9.1	F8	2	..	38112i
9	78	9.9	+85 35	6.55	6.55	Ao	8	..	37546i	59	940	10.2	+52 16	9.0	9.0	Ao	2	..	37366i
10	1245	9.9	+48 49	8.0	9.0	Ko	2	..	38125i	60	769	10.2	+28 4	8.4	9.4	Ko	2	0,2	38921i
11	1234	9.9	+43 18	8.9	9.9	Ko	1	..	38940i	61	904	10.2	+ 8 43	8.2	9.3	K2	2	..	38167i
12	1088	9.9	+38 30	9.5	9.5	Ao	2	..	37365i	62	859	10.2	+ 5 39	9.0	9.3	Fo	3	..	38167i
13	931	9.9	+33 3	9.0	9.0	Ao	2	..	38921i	63	995	10.2	+ 0 55	9.2	9.2	Ao	5	..	12391b
14	849	9.9	+29 14	9.0	9.5	F8	2	..	37525i	64	1204	10.2	- 5 22	9.2	9.2	Ao	2	..	14664b
15	767	9.9	+29 0	9.4	9.4	A	1	..	37525i	65	2935	10.2	-24 35	9.6	9.8	Go	3	..	12370b
16	766	9.9	+28 12	9.0	9.8	G5	1	..	38921i	66	2148	10.2	-27 26	9.0	9.8	Ko	2	..	42783b
17	879	9.9	+19 36	8.1	8.4	Fo	2	..	37388i	67	2176	10.2	-35 56	6.97	8.5	Ko	6	..	42101b
18	848	9.9	+ 7 35	9.0	10.2	K5	1	..	38410b	68	796	10.2	-54 16	9.2	10.3	G5	1	..	39700b
19	876	9.9	+ 6 3	9.4	9.9	F8	2	..	38410b	69	..	10.2	-69 0	..	..	Oa	..	..	76,28
20	1079	9.9	- 4 45	9.2	9.2	Ao	2	..	14664b	70	336	10.2	-69 50	8.86	8.9	F5	6	..	20540b
21	1012	9.9	- 7 12	6.88	7.95	K2	5	..	17409b	71	350	10.2	-72 22	9.3	9.8	F8	1	..	20540b
22	1107	9.9	-21 46	7.64	7.8	A2	7	..	12370b	72	106	10.2	-82 36	5.85	6.9	Ko	..	0,7 R	56,121
23	2257	9.9	-30 40	8.8	9.1	A2	4	..	24442b	73	979	10.3	+55 7	9.21	9.21	Ao	2	..	37407i
24	2194	9.9	-33 8	8.8	9.7	A2	4	..	24442b	74	1231	10.3	+40 41	9.1	9.2	A2	2	..	38940i
25	1790	9.9	-40 11	9.6	10.3	K2	1	..	42101b	75	1236	10.3	+39 21	7.28	8.28	Ko	6	..	37365i
26	1733	9.9	-47 29	9.9	10.0	F5	1	..	18482b	76	989	10.3	+33 37	8.7	8.7	Ao	4	..	37365i
27	380	9.9	-66 32	8.6	9.7	K2	4	..	38371b	77	744	10.3	+11 0	9.0	9.8	G5	2	..	38167i
28	873	10.0	+60 9	8.96	9.02	A2	3	..	38907i	78	905	10.3	+ 8 56	8.1	9.1	Ko	4	..	38167i
29	865	10.0	+59 39	8.9	9.0	A2	3	..	38907i	79	892	10.3	- 0 4	7.96	7.96	Ao	4	..	37594i
30	1080	10.0	+46 1	9.2	9.2	A	2	..	38940i	80	837	10.3	- 1 31	6.12	6.46	F2	8	2,9	37594i
31	1156	10.0	+44 55	9.17	9.17	Ao	2	..	38940i	81	1081	10.3	- 4 2	9.5	9.5	Ao	2	..	14664b
32	1115	10.0	+37 31	8.8	10.2	Ma	..	..	M	82	1121	10.3	- 6 55	7.54	7.88	F2	4	..	17409b
33	880	10.0	+19 50	8.20	8.15	B8	3	..	37388i	83	2084	10.3	-26 54	7.32	8.6	Ko	5	0,4	12370b
34	755	10.0	+12 46	8.8	9.6	G5	1	..	38167i	84	2134	10.3	-34 31	8.7	9.4	A3	6	..	24442b
35	877	10.0	+ 6 57	7.9	8.3	F5	5	3,4	14663b	85	674	10.3	-52 10	9.8	9.8	Ao	3	..	39700b
36	882	10.0	+ 4 9	7.7	7.7	Ao	6	..	37594i	86	436	10.3	-59 6	8.8	9.1	F5	3	..	20548b
37	945	10.0	+ 1 27	7.9	8.9	Ko	3	..	37594i	87	..	10.3	-69 1	..	..	O	..	R	76,28
38	1076	10.0	-14 3	8.6	8.9	F2	3	..	18649b	88	183	10.4	+78 19	6.80	7.58	G5	5	0,7	37343i
39	2079	10.0	-26 28	9.4	9.5	Ao	1	..	44357b	89	873	10.4	+58 0	8.8	9.2	F5	2	..	37407i
40	2080	10.0	-26 30	9.1	9.2	Go	1	..	44357b	90	1084	10.4	+46 1	7.8	9.0	K5	3	5,2	38940i
41	1733	10.0	-43 8	10.3	10.3	F5	2	..	20648b	91	1117	10.4	+37 40	9.0	9.0	Ao	4	..	37365i
42	1402	10.0	-51 40	7.5	8.4	Ko	7	..	39700b	92	1031	10.4	+35 12	9.12	9.10	B9	4	..	37365i
43	325	10.0	-67 59	9.5	10.1	Go	2	..	38367b	93	844	10.4	+30 16	9.4	9.4	Ao	2	..	38921i
44	334	10.0	-69 17	8.9	9.0	A2	4	..	20540b	94	997	10.4	+ 0 5	8.08	8.14	A2	3	..	37594i
45	1081	10.1	+45 16	8.5	9.6	K2	2	..	38940i	95	1050	10.4	- 3 29	8.0	8.5	F8	4	..	17409b
46	1067	10.1	+36 20	8.8	8.8	Ao	4	..	37365i	96	1108	10.4	-12 19	8.6	9.1	F8	8	..	39704b
47	743	10.1	+27 43	9.4	10.0	Go	2	..	37525i	97	981	10.4	-15 55	9.2	9.2	Ao	3	..	39704b
48	881	10.1	+20 0	8.00	9.07	K2	1	..	37388i	98	2085	10.4	-26 19	7.06	8.3	Ko	6	5,5	12370b
49	903	10.1	+ 8 18	7.7	7.7	Ao	6	..	38167i	99	102	10.4	-83 6	9.8	10.1	Fo	2	..	20557b
50	879	10.1	+ 6 49	10.4	11.0	Go	2	..	38410b	100	385	10.5	+66 38	6.59	7.37	G5	7	..	36654i

THE HENRY DRAPER CATALOGUE.

34200

5^h 10^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	991	m. 10.5	° 33 13	7.6	7.7	A3	6	..	37365i	51	812	m. 10.9	° 18 20	7.5	7.3	B3	7	5,4 R	37567i
2	910	10.5	+31 25	8.2	8.3	A5	4	5,3	37525i	52	741	10.9	+16 55	8.1	8.4	Fo	5	0,3	37567i
3	756	10.5	+11 14	5.50	5.50	Ao	10	E	37567i	53	2126	10.9	-36 17	9.0	10.3	G5	2	..	42101b
4	865	10.5	+5 31	9.7	9.7	Ao	3	..	14663b	54	283	11.0	+73 42	8.6	9.4	G5	4	..	37343i
5	984	10.5	-15 13	9.2	9.3	A3	4	..	39704b	55	742	11.0	+62 33	5.88	6.95	K2	7	..	36654i
6	2137	10.5	-34 43	9.3	10.9	Ko	2	..	24442b	56	1242	11.0	+39 10	9.8	9.9	A5	2	..	37365i
7	1848	10.5	-39 29	8.7	10.0	Go	2	..	42101b	57	995	11.0	+33 28	8.2	8.2	B8	4	..	37365i
8	1795	10.5	-40 47	9.4	9.8	Go	2	..	42101b	58	914	11.0	+31 43	8.0	9.2	K5	2	0,2	38921i
9	1740	10.5	-43 3	8.7	9.7	Ko	5	..	20648b	59	746	11.0	+27 39	8.7	9.1	F5	2	3,2	38921i
10	437	10.5	-62 56	8.8	9.2	F5	5	..	38371b	60	884	11.0	+20 0	7.60	7.68	A3	4	..	37388i
11	827	10.6	+3 38	8.3	8.7	F5	3	..	37594i	61	884	11.0	+17 26	10.0	10.0	A	1	..	37567i
12	901	10.6	+2 52	9.2	10.0	G5	2	..	14663b	62	868	11.0	+5 11	8.71	9.49	G5	3	..	14663b
13	986	10.6	-15 20	8.6	9.0	F5	4	5,3	39704b	63	954	11.0	+1 38	7.9	8.9	Ko	5	..	14663b
14	2152	10.6	-27 5	7.9	8.3	G5	6	0,5	12370b	64	900	11.0	-0 53	9.0	9.8	G5	1	..	12391b
15	2223	10.6	-32 55	9.4	9.4	Go	3	..	24442b	65	987	11.0	-15 21	10.4	11.0	G	1	..	39704b
16	2199	10.6	-33 27	8.0	8.6	F5	7	..	24442b	66	2127	11.0	-36 5	5.79	6.8	Ko	..	..	56,121
17	2185	10.6	-35 56	9.4	10.3	Go	2	..	42101b	67	265	11.1	+72 12	8.6	8.6	Ao	3	..	37343i
18	168	10.6	-79 50	9.46	9.0	B9	3	..	20557b	68	1124	11.1	+47 13	8.2	8.3	A2	4	0,2	38940i
19	348	10.7	+70 13	8.84	9.62	G5	1	..	38112i	69	1239	11.1	+42 41	5.88	7.23	Mb	5	..	37391i
20	1338	10.7	+49 24	9.2	10.6	Ma	..	..	M	70	1072	11.1	+37 0	9.1	9.1	Ao	2	..	37365i
21	1137	10.7	+41 55	8.7	8.8	A2	2	E	38088i	71	1085	11.1	-4 35	9.7	9.7	A	1	..	14664b
22	1138	10.7	+41 41	8.6	8.9	Fo	2	..	38940i	72	1139	11.1	-10 28	9.2	9.3	A3	3	..	39704b
23	911	10.7	+31 59	9.0	9.0	A	2	..	37525i	73	1112	11.1	-12 29	8.4	9.2	G5	6	..	39704b
24	746	10.7	+10 5	8.72	9.50	G5	2	..	38167i	74	1129	11.1	-19 11	7.8	8.3	Fo	5	..	12370b
25	850	10.7	+7 5	8.5	8.5	Ao	4	..	38410b	75	439	11.1	-62 9	8.3	8.7	F5	6	..	38371b
26	952	10.7	+1 13	8.24	8.24	Ao	5	..	14663b	76	337	11.1	-69 26	8.6	9.6	Ko	3	..	20540b
27	1110	10.7	-12 50	8.6	8.6	Ao	6	..	39704b	77	743	11.2	+63 2	8.0	8.0	Ao	5	..	38907i
28	1083	10.7	-16 0	9.2	10.0	G5	1	..	39704b	78	879	11.2	+54 49	8.4	8.4	Ao	2	..	37366i
29	1823	10.7	-42 41	9.7	10.1	Ko	2	..	20648b	79	1038	11.2	+35 5	8.37	8.37	Ao	6	..	37365i
30	805	10.7	-56 50	9.1	9.6	Ko	2	..	20548b	80	1051	11.2	-3 37	8.6	8.6	B9	5	..	17409b
31	761	10.7	-57 26	8.8	9.8	F2	2	..	20548b	81	1207	11.2	-5 42	8.4	9.0	Go	3	..	14664b
32	142	10.7	-80 56	8.8	9.8	Ko	2	..	20557b	82	1110	11.2	-9 55	9.66	9.66	Ao	3	..	39704b
33	874	10.8	+58 1	6.23	6.06	B3	..	0,9	56,79	83	1104	11.2	-13 46	8.6	9.6	Ko	3	..	39704b
34	942	10.8	+52 43	8.2	8.6	F5	5	3,2	37366i	84	1797	11.2	-40 26	8.8	9.4	Go	3	..	42101b
35	1051	10.8	+51 58	8.2	9.2	Ko	2	..	37366i	85	1696	11.2	-48 24	9.5	10.1	A2	1	..	18482b
36	1158	10.8	+44 42	8.7	8.7	Ao	2	..	38940i	86	382	11.2	-66 48	9.1	9.7	Go	3	..	38371b
37	829	10.8	+3 52	9.4	9.5	A5	2	..	14663b	87	351	11.2	-72 27	8.5	9.5	Ko	3	..	20540b
38	839	10.8	-1 24	8.8	8.9	A2	3	..	12391b	88	222	11.3	+75 53	8.82	9.10	Fo	2	..	37343i
39	1084	10.8	-4 55	7.20	7.76	Go	7	..	17409b	89	1143	11.3	+42 0	8.0	8.4	F5	3	..	37391i
40	1016	10.8	-7 3	8.8	8.8	Ao	3	..	14664b	90	846	11.3	+30 43	9.5	9.5	B9	2	..	37525i
41	1111	10.8	-12 56	8.6	9.4	G5	3	..	39704b	91	758	11.3	+12 17	7.9	8.9	Ko	1	..	37567i
42	1944	10.8	-38 9	8.7	9.7	Ko	3	..	42101b	92	832	11.3	+3 6	8.5	8.6	A2	5	..	14663b
43	1796	10.8	-40 9	Cl.	Cl.	G	5	R	42101b	93	1018	11.3	-7 33	8.6	8.9	Fo	2	..	14664b
44	1740	10.8	-46 38	9.3	10.0	Ko	1	..	18482b	94	1117	11.3	-21 19	8.4	8.5	A3	4	..	12370b
45	1694	10.8	-48 0	8.0	8.4	Fo	6	..	18482b	95	2057	11.3	-28 27	7.10	7.2	A2	8	..	42783b
46	1693	10.8	-48 36	9.9	10.4	Ko	1	..	18482b	96	1770	11.3	-41 22	9.6	9.4	A3	3	..	20648b
47	1248	10.9	+48 49	7.15	8.15	Ko	4	..	37366i	97	192	11.3	-77 40	7.0	7.6	Go	10	..	15162b
48	993	10.9	+46 56	8.0	8.8	G5	4	..	38940i	98	184	11.4	+78 46	9.2	10.3	K2	4	..	37558i
49	994	10.9	+33 5	8.0	8.1	A2	6	..	37365i	99	1126	11.4	+47 8	8.0	8.0	Ao	5	..	38940i
50	772	10.9	+28 49	6.89	7.17	Fo	6	..	36997i	100	1240	11.4	+44 1	8.5	9.6	K2	1	..	38940i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

34100

5^h 9^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	978	m. 9.8	° 15 57	8.0	8.8	G5	4	..	18649b	51	1203	m. 10.1	° 5 50	9.2	10.4	K5	1	..	14664b
2	1040	9.8	-20 19	9.0	9.1	Fo	3	..	12370b	52	1013	10.1	-7 49	8.6	9.1	F8	1	..	14664b
3	2287	9.8	-31 20	8.8	10.3	Ko	2	..	24442b	53	1035	10.1	-18 31	7.6	8.6	Ko	4	..	12370b
4	2214	9.8	-32 11	7.18	7.2	A3	9	..	24442b	54	2545	10.1	-23 19	10.3	9.4	A2	1	..	44357b
5	1934	9.8	-38 38	8.7	9.7	Go	2	..	42101b	55	795	10.1	-54 16	9.2	10.1	Go	1	..	39700b
6	1818	9.8	-42 7	9.0	9.7	Ko	3	..	20648b	56	763	10.1	-55 56	9.0	9.5	Go	3	..	20548b
7	761	9.8	-55 8	9.3	10.1	G5	1	..	39700b	57	420	10.1	-64 25	9.8	9.8	Ao	3	..	38371b
8	332	9.8	-68 58	Cl.	Cl.	Con.	2	R	20540b	58	380	10.2	+68 30	8.6	9.1	F8	2	..	38112i
9	78	9.9	+85 35	6.55	6.55	Ao	8	..	37546i	59	940	10.2	+52 16	9.0	9.0	Ao	2	..	37366i
10	1245	9.9	+48 49	8.0	9.0	Ko	2	..	38125i	60	769	10.2	+28 4	8.4	9.4	Ko	2	0,2	38921i
11	1234	9.9	+43 18	8.9	9.9	Ko	1	..	38940i	61	904	10.2	+8 43	8.2	9.3	K2	2	..	38167i
12	1088	9.9	+38 30	9.5	9.5	Ao	2	..	37365i	62	859	10.2	+5 39	9.0	9.3	Fo	3	..	38167i
13	931	9.9	+33 3	9.0	9.0	Ao	2	..	38921i	63	995	10.2	+0 55	9.2	9.2	Ao	5	..	12391b
14	849	9.9	+29 14	9.0	9.5	F8	2	..	37525i	64	1204	10.2	-5 22	9.2	9.2	Ao	2	..	14664b
15	767	9.9	+29 0	9.4	9.4	A	1	..	37525i	65	2935	10.2	-24 35	9.6	9.8	Go	3	..	12370b
16	766	9.9	+28 12	9.0	9.8	G5	1	..	38921i	66	2148	10.2	-27 26	9.0	9.8	Ko	2	..	42783b
17	879	9.9	+19 36	8.1	8.4	Fo	2	..	37388i	67	2176	10.2	-35 56	6.97	8.5	Ko	6	..	42101b
18	848	9.9	+7 35	9.0	10.2	K5	1	..	38410b	68	796	10.2	-54 16	9.2	10.3	G5	1	..	39700b
19	876	9.9	+6 3	9.4	9.9	F8	2	..	38410b	69	..	10.2	-69 0	..	..	Oa	..	..	76,28
20	1079	9.9	-4 45	9.2	9.2	Ao	2	..	14664b	70	336	10.2	-69 50	8.86	8.9	F5	6	..	20540b
21	1012	9.9	-7 12	6.88	7.95	K2	5	..	17409b	71	350	10.2	-72 22	9.3	9.8	F8	1	..	20540b
22	1107	9.9	-21 46	7.64	7.8	A2	7	..	12370b	72	106	10.2	-82 36	5.85	6.9	Ko	..	0,7 R	56,121
23	2257	9.9	-30 40	8.8	9.1	A2	4	..	24442b	73	979	10.3	+55 7	9.21	9.21	Ao	2	..	37407i
24	2194	9.9	-33 8	8.8	9.7	A2	4	..	24442b	74	1231	10.3	+40 41	9.1	9.2	A2	2	..	38940i
25	1790	9.9	-40 11	9.6	10.3	K2	1	..	42101b	75	1236	10.3	+39 21	7.28	8.28	Ko	6	..	37365i
26	1733	9.9	-47 29	9.9	10.0	F5	1	..	18482b	76	989	10.3	+33 37	8.7	8.7	Ao	4	..	37365i
27	380	9.9	-66 32	8.6	9.7	K2	4	..	38371b	77	744	10.3	+11 0	9.0	9.8	G5	2	..	38167i
28	873	10.0	+60 9	8.96	9.02	A2	3	..	38907i	78	905	10.3	+8 56	8.1	9.1	Ko	4	..	38167i
29	865	10.0	+59 39	8.9	9.0	A2	3	..	38907i	79	892	10.3	-0 4	7.96	7.96	Ao	4	..	37594i
30	1080	10.0	+46 1	9.2	9.2	A	2	..	38940i	80	837	10.3	-1 31	6.12	6.46	F2	8	2,9	37594i
31	1156	10.0	+44 55	9.17	9.17	Ao	2	..	38940i	81	1081	10.3	-4 2	9.5	9.5	Ao	2	..	14664b
32	1115	10.0	+37 31	8.8	10.2	Ma	..	..	M	82	1121	10.3	-6 55	7.54	7.88	F2	4	..	17409b
33	880	10.0	+19 50	8.20	8.15	B8	3	..	37388i	83	2084	10.3	-26 54	7.32	8.6	Ko	5	0,4	12370b
34	755	10.0	+12 46	8.8	9.6	G5	1	..	38167i	84	2134	10.3	-34 31	8.7	9.4	A3	6	..	24442b
35	877	10.0	+6 57	7.9	8.3	F5	5	3,4	14663b	85	674	10.3	-52 10	9.8	9.8	Ao	3	..	39700b
36	882	10.0	+4 9	7.7	7.7	Ao	6	..	37594i	86	436	10.3	-59 6	8.8	9.1	F5	3	..	20548b
37	945	10.0	+1 27	7.9	8.9	Ko	3	..	37594i	87	..	10.3	-69 1	..	..	O	..	R	76,28
38	1076	10.0	-14 3	8.6	8.9	F2	3	..	18649b	88	183	10.4	+78 19	6.80	7.58	G5	5	0,7	37343i
39	2079	10.0	-26 28	9.4	9.5	Ao	1	..	44357b	89	873	10.4	+58 0	8.8	9.2	F5	2	..	37407i
40	2080	10.0	-26 30	9.1	9.2	Go	1	..	44357b	90	1084	10.4	+46 1	7.8	9.0	K5	3	5,2	38940i
41	1733	10.0	-43 8	10.3	10.3	F5	2	..	20648b	91	1117	10.4	+37 40	9.0	9.0	Ao	4	..	37365i
42	1402	10.0	-51 40	7.5	8.4	Ko	7	..	39700b	92	1031	10.4	+35 12	9.12	9.10	B9	4	..	37365i
43	325	10.0	-67 59	9.5	10.1	Go	2	..	38367b	93	844	10.4	+30 16	9.4	9.4	Ao	2	..	38921i
44	334	10.0	-69 17	8.9	9.0	A2	4	..	20540b	94	997	10.4	+0 5	8.08	8.14	A2	3	..	37594i
45	1081	10.1	+45 16	8.5	9.6	K2	2	..	38940i	95	1050	10.4	-3 29	8.0	8.5	F8	4	..	17409b
46	1067	10.1	+36 20	8.8	8.8	Ao	4	..	37365i	96	1108	10.4	-12 19	8.6	9.1	F8	8	..	39704b
47	743	10.1	+27 43	9.4	10.0	Go	2	..	37525i	97	981	10.4	-15 55	9.2	9.2	Ao	3	..	39704b
48	881	10.1	+20 0	8.00	9.07	K2	1	..	37388i	98	2085	10.4	-26 19	7.06	8.3	Ko	6	5,5	12370b
49	903	10.1	+8 18	7.7	7.7	Ao	6	..	38167i	99	102	10.4	-83 6	9.8	10.1	Fo	2	..	20557b
50	879	10.1	+6 49	10.4	11.0	Go	2	..	38410b	100	385	10.5	+66 38	6.59	7.37	G5	7	..	36654i

THE HENRY DRAPER CATALOGUE.

34200

5^h 10^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	991	10.5	+33 13	7.6	7.7	A ₃	6	..	37365i	51	812	10.9	+18 20	7.5	7.3	B ₃	7	5,4 R	37567i
2	910	10.5	+31 25	8.2	8.3	A ₅	4	5,3	37525i	52	741	10.9	+16 55	8.1	8.4	F ₀	5	0,3	37567i
3	756	10.5	+11 14	5.50	5.50	A ₀	10	E	37567i	53	2126	10.9	-36 17	9.0	10.3	G ₅	2	..	42101b
4	865	10.5	+5 31	9.7	9.7	A ₀	3	..	14663b	54	283	11.0	+73 42	8.6	9.4	G ₅	4	..	37343i
5	984	10.5	-15 13	9.2	9.3	A ₃	4	..	39704b	55	742	11.0	+62 33	5.88	6.95	K ₂	7	..	36654i
6	2137	10.5	-34 43	9.3	10.9	K ₀	2	..	24442b	56	1242	11.0	+39 10	9.8	9.9	A ₅	2	..	37365i
7	1848	10.5	-39 29	8.7	10.0	G ₀	2	..	42101b	57	995	11.0	+33 28	8.2	8.2	B ₈	4	..	37365i
8	1795	10.5	-40 47	9.4	9.8	G ₀	2	..	42101b	58	914	11.0	+31 43	8.0	9.2	K ₅	2	0,2	38921i
9	1740	10.5	-43 3	8.7	9.7	K ₀	5	..	20648b	59	746	11.0	+27 39	8.7	9.1	F ₅	2	3,2	38921i
10	437	10.5	-62 56	8.8	9.2	F ₅	5	..	38371b	60	884	11.0	+20 0	7.60	7.68	A ₃	4	..	37388i
11	827	10.6	+3 38	8.3	8.7	F ₅	3	..	37594i	61	884	11.0	+17 26	10.0	10.0	A	1	..	37567i
12	901	10.6	+2 52	9.2	10.0	G ₅	2	..	14663b	62	868	11.0	+5 11	8.71	9.49	G ₅	3	..	14663b
13	986	10.6	-15 20	8.6	9.0	F ₅	4	5,3	39704b	63	954	11.0	+1 38	7.9	8.9	K ₀	5	..	14663b
14	2152	10.6	-27 5	7.9	8.3	G ₅	6	0,5	12370b	64	900	11.0	-0 53	9.0	9.8	G ₅	1	..	12391b
15	2223	10.6	-32 55	9.4	9.4	G ₀	3	..	24442b	65	987	11.0	-15 21	10.4	11.0	G	1	..	39704b
16	2199	10.6	-33 27	8.0	8.6	F ₅	7	..	24442b	66	2127	11.0	-36 5	5.79	6.8	K ₀	..	..	56,121
17	2185	10.6	-35 56	9.4	10.3	G ₀	2	..	42101b	67	265	11.1	+72 12	8.6	8.6	A ₀	3	..	37343i
18	168	10.6	-79 50	9.46	9.0	B ₉	3	..	20557b	68	1124	11.1	+47 13	8.2	8.3	A ₂	4	0,2	38940i
19	348	10.7	+70 13	8.84	9.62	G ₅	1	..	38112i	69	1239	11.1	+42 41	5.88	7.23	Mb	5	..	37391i
20	1338	10.7	+49 24	9.2	10.6	Ma	..	..	M	70	1072	11.1	+37 0	9.1	9.1	A ₀	2	..	37365i
21	1137	10.7	+41 55	8.7	8.8	A ₂	2	E	38088i	71	1085	11.1	-4 35	9.7	9.7	A	1	..	14664b
22	1138	10.7	+41 41	8.6	8.9	F ₀	2	..	38940i	72	1139	11.1	-10 28	9.2	9.3	A ₃	3	..	39704b
23	911	10.7	+31 59	9.0	9.0	A	2	..	37525i	73	1112	11.1	-12 29	8.4	9.2	G ₅	6	..	39704b
24	746	10.7	+10 5	8.72	9.50	G ₅	2	..	38167i	74	1129	11.1	-19 11	7.8	8.3	F ₀	5	..	12370b
25	850	10.7	+7 5	8.5	8.5	A ₀	4	..	38410b	75	439	11.1	-62 9	8.3	8.7	F ₅	6	..	38371b
26	952	10.7	+1 13	8.24	8.24	A ₀	5	..	14663b	76	337	11.1	-69 26	8.6	9.6	K ₀	3	..	20540b
27	1110	10.7	-12 50	8.6	8.6	A ₀	6	..	39704b	77	743	11.2	+63 2	8.0	8.0	A ₀	5	..	38907i
28	1083	10.7	-16 0	9.2	10.0	G ₅	1	..	39704b	78	879	11.2	+54 49	8.4	8.4	A ₀	2	..	37366i
29	1823	10.7	-42 41	9.7	10.1	K ₀	2	..	20648b	79	1038	11.2	+35 5	8.37	8.37	A ₀	6	..	37365i
30	805	10.7	-56 50	9.1	9.6	K ₀	2	..	20548b	80	1051	11.2	-3 37	8.6	8.6	B ₉	5	..	17409b
31	761	10.7	-57 26	8.8	9.8	F ₂	2	..	20548b	81	1207	11.2	-5 42	8.4	9.0	G ₀	3	..	14664b
32	142	10.7	-80 56	8.8	9.8	K ₀	2	..	20557b	82	1110	11.2	-9 55	9.66	9.66	A ₀	3	..	39704b
33	874	10.8	+58 1	6.23	6.06	B ₃	..	0,9	56,79	83	1104	11.2	-13 46	8.6	9.6	K ₀	3	..	39704b
34	942	10.8	+52 43	8.2	8.6	F ₅	5	3,2	37366i	84	1797	11.2	-40 26	8.8	9.4	G ₀	3	..	42101b
35	1051	10.8	+51 58	8.2	9.2	K ₀	2	..	37366i	85	1696	11.2	-48 24	9.5	10.1	A ₂	1	..	18482b
36	1158	10.8	+44 42	8.7	8.7	A ₀	2	..	38940i	86	382	11.2	-66 48	9.1	9.7	G ₀	3	..	38371b
37	829	10.8	+3 52	9.4	9.5	A ₅	2	..	14663b	87	351	11.2	-72 27	8.5	9.5	K ₀	3	..	20540b
38	839	10.8	-1 24	8.8	8.9	A ₂	3	..	12391b	88	222	11.3	+75 53	8.82	9.10	F ₀	2	..	37343i
39	1084	10.8	-4 55	7.20	7.76	G ₀	7	..	17409b	89	1143	11.3	+42 0	8.0	8.4	F ₅	3	..	37391i
40	1016	10.8	-7 3	8.8	8.8	A ₀	3	..	14664b	90	846	11.3	+30 43	9.5	9.5	B ₉	2	..	37525i
41	1111	10.8	-12 56	8.6	9.4	G ₅	3	..	39704b	91	758	11.3	+12 17	7.9	8.9	K ₀	1	..	37567i
42	1944	10.8	-38 9	8.7	9.7	K ₀	3	..	42101b	92	832	11.3	+3 6	8.5	8.6	A ₂	5	..	14663b
43	1796	10.8	-40 9	Cl.	Cl.	G	5	R	42101b	93	1018	11.3	-7 33	8.6	8.9	F ₀	2	..	14664b
44	1740	10.8	-46 38	9.3	10.0	K ₀	1	..	18482b	94	1117	11.3	-21 19	8.4	8.5	A ₃	4	..	12370b
45	1694	10.8	-48 0	8.0	8.4	F ₀	6	..	18482b	95	2057	11.3	-28 27	7.10	7.2	A ₂	8	..	42783b
46	1693	10.8	-48 36	9.9	10.4	K ₀	1	..	18482b	96	1770	11.3	-41 22	9.6	9.4	A ₃	3	..	20648b
47	1248	10.9	+48 49	7.15	8.15	K ₀	4	..	37366i	97	192	11.3	-77 40	7.0	7.6	G ₀	10	..	15162b
48	993	10.9	+46 56	8.0	8.8	G ₅	4	..	38940i	98	184	11.4	+78 46	9.2	10.3	K ₂	4	..	37558i
49	994	10.9	+33 5	8.0	8.1	A ₂	6	..	37365i	99	1126	11.4	+47 8	8.0	8.0	A ₀	5	..	38940i
50	772	10.9	+28 49	6.89	7.17	F ₀	6	..	36997i	100	1240	11.4	+44 1	8.5	9.6	K ₂	1	..	38940i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

34300

5^h 11^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1105	m. 11.4	° +38 53	9.0	9.0	Ao	4	..	37365i	51	909	m. 11.7	° +20 26	8.6	8.6	B9	2	R	37388i
2	1127	11.4	+37 33	8.0	8.0	B8	6	..	37365i	52	886	11.7	+17 34	9.0	9.0	A	2	..	37567i
3	888	11.4	+23 55	6.89	7.89	Ko	5	..	37388i	53	1128	11.7	- 6 42	9.2	9.2	A	2	..	14664b
4	742	11.4	+16 14	7.5	8.3	G5	5	..	37567i	54	1118	11.7	-11 56	9.2	9.2	Ao	3	..	39704b
5	779	11.4	+15 8	8.39	9.17	G5	3	..	37567i	55	989	11.7	-15 27	9.5	10.3	G5	2	..	39704b
6	905	11.4	- 0 22	9.2	10.2	Ko	1	..	12391b	56	2100	11.7	-26 23	10.3	9.0	Ao	3	..	44357b
7	841	11.4	- 1 46	8.5	8.5	B8	5	..	17409b	57	2146	11.7	-29 37	8.4	8.3	A2	7	..	24442b
8	1140	11.4	-10 22	9.2	10.4	K5	2	..	39704b	58	2135	11.7	-36 46	6.64	8.0	G5	7	..	42101b
9	1080	11.4	-14 37	7.71	7.69	B9	5	1,2	18649b	59	318	11.7	-74 58	8.63	8.9	A2	6	..	15162b
10	2161	11.4	-27 3	5.04	5.02	B9	..	..	56,79	60	141	11.8	+83 47	7.26	7.26	Ao	8	E	37558i
11	2204	11.4	-33 31	8.7	9.4	Ko	3	..	24442b	61	828	11.8	+58 14	8.4	8.5	A2	..	2,5-	56,79
12	1771	11.4	-41 17	9.4	9.7	Go	3	..	20648b	62	1244	11.8	+40 18	8.8	8.9	A2	2	..	37365i
13	1676	11.4	-50 45	9.0	10.1	K2	1	..	39700b	63	1108	11.8	+38 36	8.6	8.6	B8	4	..	37365i
14	763	11.4	-57 26	9.4	9.8	F5	2	..	20548b	64	1002	11.8	+33 39	6.11	6.09	B9	..	1,8	56,79
15	874	11.5	+22 45	9.4	9.8	F5	2	..	37388i	65	888	11.8	+17 16	9.0	9.0	A	3	..	37567i
16	760	11.5	+12 28	7.24	8.24	Ko	5	..	37567i	66	911	11.8	+ 8 48	8.3	9.1	G5	1	..	38167i
17	957	11.5	+ 1 50	6.37	6.35	B9	8	..	37594i	67	885	11.8	+ 6 11	8.5	9.3	G5	2	..	38167i
18	1117	11.5	-11 28	6.51	7.07	Go	8	R	14664b	68	836	11.8	+ 3 22	8.4	8.7	Fo	4	..	37594i
19	1115	11.5	-11 28	6.51	7.07	A2	8	R	14664b	69	959	11.8	+ 1 44	9.2	9.2	Ao	4	..	14663b
20	1115	11.5	-12 15	9.2	10.2	Ko	1	..	39704b	70	1021	11.8	- 7 19	8.0	8.1	A5	6	..	17409b
21	1107	11.5	-13 6	9.2	9.6	F5	2	..	39704b	71	1119	11.8	-11 22	8.0	9.0	Ko	4	..	14664b
22	1089	11.5	-16 28	8.4	8.9	F8	3	..	39704b	72	1117	11.8	-12 32	8.8	9.6	G5	5	..	39704b
23	1057	11.5	-22 9	9.2	9.8	Go	2	0,1	41088b	73	1109	11.8	-13 11	9.7	9.8	A2	1	..	39704b
24	2566	11.5	-23 0	6.86	7.0	Ao	9	..	12370b	74	2309	11.8	-31 16	8.4	9.4	F8	5	..	24442b
25	2143	11.5	-29 52	7.31	8.5	Ko	8	..	24442b	75	1415	11.8	-51 28	8.4	9.5	K5	3	..	39700b
26	1947	11.5	-44 20	8.3	9.1	Ao	5	0,7	12756b	76	479	11.8	-58 40	8.0	8.2	B8	7	2,4	20548b
27	766	11.5	-55 41	7.0	7.7	Go	9	..	20548b	77	395	11.8	-60 6	8.54	9.0	G5	4	..	38371b
28	444	11.5	-59 46	9.1	9.6	Go	2	..	20548b	78	307	11.8	-76 34	8.7	9.2	F8	4	..	15162b
29	171	11.6	+79 7	8.6	9.6	Ko	1	..	37558b	79	1091	11.9	+45 7	8.77	8.83	A2	2	..	37391i
30	387	11.6	+66 55	7.8	8.8	Ko	5	5,2	38952i	80	1165	11.9	+44 54	8.27	8.27	Ao	2	..	38940i
31	1090	11.6	+45 8	7.87	8.15	Fo	3	..	37391i	81	1245	11.9	+40 59	6.82	8.00	K5	6	3,3	37365i
32	1240	11.6	+40 21	6.32	7.32	Ko	6	0,2	37365i	82	1003	11.9	+33 3	8.2	8.2	B9	4	4,6	38921i
33	1073	11.6	+36 31	7.56	7.44	B5	8	0,R	37365i	83	849	11.9	+30 49	9.0	9.5	F8	2	..	37525i
34	1000	11.6	+33 17	4.81	5.81	Ko	..	0,10	56,79	84	773	11.9	+28 41	7.25	7.33	A3	5	..	36997i
35	886	11.6	+20 1	6.84	7.26	F5	5	..	37388i	85	888	11.9	+19 52	8.3	8.7	F5	2	..	37388i
36	848	11.6	+13 29	8.1	8.5	F5	4	..	37567i	86	866	11.9	+14 24	8.2	8.7	F8	3	..	37567i
37	761	11.6	+12 57	8.3	8.3	Ao	3	..	37567i	87	761	11.9	+11 37	7.8	7.8	Ao	3	..	37567i
38	789	11.6	+ 9 49	7.52	7.47	B8	6	..	38167i	88	1209	11.9	- 5 16	8.8	8.9	A2	3	..	17409b
39	870	11.6	+ 5 51	9.0	9.0	Ao	1	..	14663b	89	1073	11.9	- 8 35	9.0	9.4	F5	2	..	14664b
40	889	11.6	+ 4 33	8.5	9.9	Ma	..	..	35096i	90	991	11.9	-15 37	9.9	10.7	G5	1	..	39704b
41	844	11.6	- 1 1	8.7	8.7	Ao	5	..	14663b	91	2574	11.9	-23 31	9.1	9.7	G5	1	..	12370b
42	1208	11.6	- 5 11	8.8	8.9	A2	3	..	14664b	92	2147	11.9	-29 53	9.39	10.0	Go	2	..	24442b
43	2955	11.6	-24 24	8.4	8.9	A5	5	5,7	44357b	93	810	11.9	-56 33	9.5	9.8	F2	2	..	20548b
44	2096	11.6	-26 32	8.1	9.0	K5	3	5,3	12370b	94	480	11.9	-58 15	9.1	9.4	F5	2	..	20548b
45	1752	11.6	-43 3	9.3	10.6	Ko	2	..	20648b	95	446	11.9	-59 42	7.14	8.4	K2	6	2,8	42691b
46	1871	11.6	-45 54	9.1	9.4	A3	5	..	18482b	96	431	11.9	-63 44	9.5	10.5	Ko	1	..	38371b
47	677	11.6	-52 8	5.88	7.0	K5	..	5,9	56,121	97	352	11.9	-72 11	8.3	9.3	Ko	7	..	20540b
48	817	11.6	-53 5	7.5	8.4	G5	6	..	39700b	98	1149	12.0	+50 54	8.0	8.1	A2	4	..	37366i
49	441	11.6	-65 17	7.14	7.2	F5	9	..	38371b	99	1167	12.0	+44 33	8.6	8.6	Ao	3	..	38940i
50	1245	11.7	+39 14	8.2	8.6	F5	6	..	37365i	100	912	12.0	+ 8 43	7.8	8.8	Ko	3	..	38167i

THE HENRY DRAPER CATALOGUE.

34400

5^h 12^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	873	12.0	+ 6 1	9.0	9.6	Go	3	..	38410b	51	1139	12.4	+37 11	9.8	9.8	Ao	2	..	37365i
2	874	12.0	+ 5 55	9.2	10.2	Ko	1	..	38410b	52	1008	12.4	+33 39	5.39	5.39	Aop	..	0.9 R	56,79
3	1210	12.0	- 5 45	8.6	9.4	G5	2	..	14664b	53	750	12.4	+27 58	8.4	8.5	A2	3	..	38921i
4	1084	12.0	-13 59	9.5	9.8	Fo	3	..	39704b	54	852	12.4	+13 18	7.9	9.3	Mb	3	..	37567i
5	1083	12.0	-14 17	9.2	10.3	K2	1	..	39704b	55	914	12.4	+ 8 11	8.5	8.6	A2	3	..	38410b
6	2339	12.0	-25 5	9.03	9.8	Go	2	..	12370b	56	891	12.4	+ 4 35	8.1	8.4	Fo	2	..	37594i
7	1838	12.0	-42 31	9.5	10.3	G5	1	..	20648b	57	995	12.4	-15 3	9.40	9.90	F8	3	..	39704b
8	1755	12.0	-43 56	9.5	10.6	Ko	2	..	20648b	58	2154	12.4	-29 33	8.8	8.3	Go	4	5.5	12663b
9	315	12.1	+69 17	8.0	8.3	F2	3	..	38112i	59	1869	12.4	-39 23	9.6	9.8	F8	1	..	42101b
10	1340	12.1	+49 13	9.9	9.9	A	2	..	37366i	60	441	12.4	-62 14	9.2	9.7	F8	2	..	38371b
11	1248	12.1	+40 1	4.85	5.41	Go	..	0.6 R	56,79	61	395	12.4	-67 12	9.5	10.5	Ko	2	..	38367b
12	1134	12.1	+37 5	9.4	9.4	Ao	2	..	37365i	62	316	12.5	+69 49	8.24	9.31	K2	2	..	38112i
13	1005	12.1	+33 25	8.0	8.1	A3	6	..	37365i	63	317	12.5	+69 28	8.0	8.1	A5	3	..	38112i
14	851	12.1	+30 17	8.8	9.8	Ko	2	5.1	37525i	64	380	12.5	+67 27	8.5	9.5	Ko	1	..	38952i
15	850	12.1	+13 32	7.8	8.1	Fo	4	..	37567i	65	868	12.5	+59 4	8.7	9.5	G5	1	..	38907i
16	908	12.1	- 0 24	10.4	10.4	A	1	..	12391b	66	1247	12.5	+40 56	8.6	8.6	Ao	3	..	38940i
17	1024	12.1	- 7 3	8.0	8.0	Ao	3	..	14664b	67	1046	12.5	+35 41	9.1	..	Nb	..	..	M
18	1113	12.1	-13 47	10.1	10.1	Ao	2	..	39704b	68	860	12.5	+29 36	8.8	8.8	Ao	3	0.2	37525i
19	1955	12.1	-38 28	8.5	10.6	K5	1	..	42101b	69	813	12.5	+21 42	7.8	7.8	B8	3	..	37388i
20	1840	12.1	-42 43	9.1	10.1	Ko	3	..	20648b	70	792	12.5	+10 0	8.57	8.99	F5	3	..	38167i
21	1757	12.1	-43 50	8.7	10.0	G5	6	..	20648b	71	857	12.5	+ 7 59	7.5	8.5	Ko	6	..	38167i
22	388	12.2	+66 57	8.4	8.7	F2	2	2.2	38952i	72	2962	12.5	-24 16	9.6	9.8	F2	2	..	12370b
23	880	12.2	+54 57	8.16	8.94	G5	3	..	37366i	73	2347	12.5	-25 26	7.66	8.3	Ao	7	0.7	12370b
24	1112	12.2	+38 47	8.8	9.8	Ko	4	..	37365i	74	2069	12.5	-28 15	7.6	9.2	K5	3	..	42783b
25	1078	12.2	+36 5	7.9	7.8	B5	6	..	37365i	75	2314	12.5	-31 3	7.6	9.1	Go	5	..	24442b
26	1044	12.2	+35 45	8.2	8.2	B8	4	..	37365i	76	422	12.5	-61 11	9.1	9.6	A2	3	..	38371b
27	887	12.2	+ 7 2	8.5	8.5	Ao	3	..	14663b	77	994	12.6	+34 47	6.96	6.91	B8	8	..	37365i
28	875	12.2	+ 5 22	7.26	8.04	G5	5	..	37594i	78	995	12.6	+34 28	8.8	9.6	G5	2	..	37365i
29	1201	12.2	- 2 4	8.6	8.7	A2	3	..	17409b	79	852	12.6	+30 16	9.5	9.5	A	1	..	37525i
30	1200	12.2	- 2 42	9.2	9.2	Ao	3	..	12391b	80	911	12.6	- 0 29	8.8	8.9	A2	3	..	14663b
31	993	12.2	-15 12	9.2	9.5	Fo	3	..	39704b	81	1090	12.6	- 4 51	8.85	8.85	Ao	3	..	14664b
32	1119	12.2	-21 13	7.8	7.9	A2	6	..	12370b	82	1060	12.6	-22 23	8.0	8.3	Ko	6	0.4	41088b
33	2577	12.2	-23 10	7.6	8.1	G5	6	..	12370b	83	2289	12.6	-29 58	9.19	9.7	G5	3	..	24442b
34	2150	12.2	-29 51	8.74	9.4	Ko	3	..	24442b	84	2242	12.6	-32 37	7.06	7.4	F8	9	..	24442b
35	2199	12.2	-35 2	6.68	7.2	A2	..	2.10	28,197	85	2216	12.6	-33 10	8.4	8.5	Fo	7	..	24442b
36	1749	12.2	-47 18	8.5	9.1	Fo	4	..	18482b	86	1956	12.6	-38 13	8.7	9.7	G5	2	..	42101b
37	340	12.2	-69 39	8.1	9.2	K2	5	..	20540b	87	768	12.6	-55 46	9.2	9.5	F2	3	..	20548b
38	470	12.3	+65 47	9.5	9.6	A2	2	2.2	38112i	88	765	12.6	-57 56	9.1	9.5	F5	2	..	20548b
39	1251	12.3	+49 3	9.4	9.4	A	3	..	37366i	89	331	12.6	-68 4	9.1	10.1	Ko	2	..	38367b
40	1251	12.3	+39 28	8.2	9.4	K5	4	..	37365i	90	374	12.6	-70 30	9.4	9.8	F5	2	..	20540b
41	1113	12.3	+38 59	8.5	9.0	F8	4	..	37365i	91	391	12.7	+66 6	8.0	8.0	Ao	3	..	36654i
42	1136	12.3	+37 13	9.1	9.6	F8	2	..	37365i	92	1152	12.7	+41 6	8.1	8.2	A2	4	1.4	38940i
43	993	12.3	+34 18	8.7	9.9	K5	..	..	M	93	1141	12.7	+38 2	8.5	8.4	B5	6	..	37365i
44	774	12.3	+28 47	8.8	8.8	A	1	R	37525i	94	1123	12.7	-21 23	9.0	9.3	A3	3	..	44357b
45	855	12.3	+ 7 15	7.7	8.3	Go	7	..	38167i	95	2108	12.7	-26 27	8.4	9.2	F8	3	..	12370b
46	909	12.3	- 0 27	9.0	10.0	Ko	1	..	12391b	96	2217	12.7	-33 39	7.02	8.5	G5	8	..	24442b
47	1069	12.3	-17 15	6.48	6.31	B3	7	0.9-	20232b	97	2203	12.7	-35 56	8.4	10.3	K2	2	..	42101b
48	1750	12.3	-47 2	var.	var.	Md	..	R	56,199	98	1170	12.8	+44 19	6.72	7.72	Ko	4	..	37391i
49	61	12.3	-85 30	8.4	9.0	Go	7	..	15145b	99	1010	12.8	+33 53	6.52	6.66	A5	6	..	37365i
50	285	12.4	+73 36	7.03	8.38	Ma	6	..	37343i	100	794	12.8	+ 9 6	7.5	7.6	A2	6	..	38167i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

34500

5^h 12^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	841	12.8	+ 3 35	8.8	9.2	F5	4	..	37594i	51	1095	13.2	- 4 33	9.2	9.6	F5	2	..	14664b
2	912	12.8	- 0 23	9.0	9.0	Ao	3	..	14663b	52	1079	13.2	- 8 20	8.0	9.2	K5	3	..	14664b
3	1028	12.8	- 6 57	3.68	3.56	B5	..	R	6403c	53	1124	13.2	-12 23	8.5	9.6	K2	4	..	39704b
4	2291	12.8	-30 29	8.2	9.1	F8	4	..	24442b	54	2328	13.2	-31 23	7.45	7.9	F5	9	..	24442b
5	1847	12.8	-42 57	8.7	9.1	F8	7	..	20648b	55	399	13.2	-67 51	9.5	9.6	A2	3	..	38367b
6	168	12.9	+80 58	8.5	9.5	Ko	4	..	37558i	56	1055	13.3	+51 19	9.2	9.2	Ao	2	..	37366i
7	1171	12.9	+44 32	8.8	8.8	B9	2	..	38940i	57	1253	13.3	+40 59	5.46	5.54	A3	..	1,7-	56,79
8	1082	12.9	+36 50	8.5	9.6	K2	2	..	37365i	58	1144	13.3	+37 18	8.5	9.6	K2	2	..	37365i
9	854	12.9	+30 54	9.0	9.0	Ao	2	2,2	37525i	59	816	13.3	+22 0	5.14	6.14	Ko	9	R	37388i
10	877	12.9	+ 5 12	8.61	8.59	B9	6	..	14663b	60	796	13.3	+ 9 55	8.27	9.27	Ko	2	..	38167i
11	913	12.9	- 0 9	7.38	7.36	B9	6	0,5	37594i	61	967	13.3	+ 1 59	9.0	9.0	Ao	3	..	14663b
12	1132	12.9	- 6 44	8.6	9.4	G5	1	..	14664b	62	966	13.3	+ 1 9	8.99	9.77	G5	2	..	14663b
13	1073	12.9	-17 53	6.83	6.97	A5	7	..	18649b	63	1046	13.3	-18 15	9.0	9.8	G5	2	..	12370b
14	1053	12.9	-20 57	9.2	8.9	Ao	4	..	44357b	64	1045	13.3	-18 46	8.0	8.1	A5	4	..	44357b
15	2322	12.9	-31 56	9.1	10.3	G5	1	..	24442b	65	2594	13.3	-23 57	9.4	9.5	Go	1	..	44357b
16	2218	12.9	-33 12	9.4	10.3	Go	2	..	24442b	66	2182	13.3	-27 21	7.8	9.2	K2	3	..	42783b
17	1790	12.9	-41 21	7.2	8.5	K2	6	..	42101b	67	2147	13.3	-36 26	9.4	10.4	G5	1	..	42101b
18	309	12.9	-76 35	8.9	9.3	F5	3	..	15162b	68	2112	13.3	-37 14	9.1	9.8	F5	3	..	42101b
19	1094	13.0	+45 19	8.8	8.9	A3	2	..	37391i	69	1757	13.3	-47 34	8.6	8.8	F5	4	..	18482b
20	1254	13.0	+39 16	9.4	9.4	A	4	..	37365i	70	1717	13.3	-48 48	8.0	8.2	F8	5	..	18482b
21	747	13.0	+17 0	9.2	9.5	Fo	2	..	37567i	71	821	13.3	-53 45	10.0	10.1	A5	1	..	39700b
22	763	13.0	+11 59	7.9	8.3	F5	4	..	37567i	72	443	13.3	-62 7	9.5	9.9	F5	2	..	38371b
23	1093	13.0	- 4 37	9.2	9.2	Ao	2	..	14664b	73	431	13.3	-64 34	9.2	9.8	Go	3	..	38371b
24	1078	13.0	- 8 46	8.5	9.1	Go	3	..	14664b	74	444	13.3	-65 34	Cl.	Cl.	Con.	..	R	M
25	1144	13.0	-10 48	9.2	9.0	B	2	R	39704b	75	870	13.4	+59 11	7.26	8.04	G5	6	..	37407i
26	1126	13.0	-11 5	9.2	9.3	A2	3	..	39704b	76	1086	13.4	+36 34	7.38	7.21	B3	6	0, ..	37365i
27	1001	13.0	-15 19	6.74	6.69	B8	8	..	18649b	77	1054	13.4	+35 41	7.47	8.82	Ma	4	..	37365i
28	999	13.0	-15 44	8.6	8.7	A2	4	..	39704b	78	1013	13.4	+33 52	5.16	5.30	A5p	..	0, R	56,79
29	2146	13.0	-36 22	8.4	10.4	G5	2	..	42101b	79	893	13.4	+20 1	6.22	7.22	Ko	6	..	37388i
30	1791	13.0	-41 11	7.9	8.8	G5	6	..	42101b	80	880	13.4	+ 5 59	9.0	10.1	K2	2	..	38410b
31	187	13.1	+78 13	6.80	7.08	Fo	6	0,8	37343i	81	845	13.4	+ 3 52	9.0	9.5	F8	2	..	14663b
32	1151	13.1	+50 31	8.6	8.6	Ao	2	..	37366i	82	1208	13.4	- 2 39	8.6	8.6	Ao	3	..	12391b
33	998	13.1	+46 52	6.48	6.76	Fo	7	R	38940i	83	1135	13.4	-19 35	8.4	9.3	K2	3	..	12370b
34	1255	13.1	+39 41	7.17	7.17	Ao	6	..	37365i	84	2113	13.4	-37 29	9.4	10.6	Ko	2	..	42101b
35	891	13.1	+ 6 39	7.7	8.7	Ko	3	5,2	38167i	85	1960	13.4	-38 46	8.7	8.8	A3	4	..	42101b
36	1123	13.1	-12 54	8.6	9.4	G5	2	..	18649b	86	1810	13.4	-40 7	9.6	10.1	Go	2	..	42101b
37	1116	13.1	-13 37	5.66	6.66	Ko	..	0,8 R	56,79	87	683	13.4	-52 17	6.34	7.3	Ko	8	..	39700b
38	2109	13.1	-37 41	8.4	8.6	F2	5	..	42101b	88	878	13.5	+60 15	9.2	9.3	A2	2	..	38907i
39	1643	13.1	-49 33	7.7	8.9	G5	5	..	12756b	89	1158	13.5	+41 19	8.5	9.1	Go	2	..	38940i
40	680	13.1	-52 46	7.2	7.6	Ko	7	..	39700b	90	945	13.5	+32 41	7.01	7.57	Go	6	..	37365i
41	820	13.1	-53 12	8.5	8.9	F5	4	..	39700b	91	777	13.5	+28 5	9.4	10.0	G	1	..	37525i
42	443	13.1	-65 20	7.8	7.8	B8	7	..	38371b	92	918	13.5	+20 7	8.70	9.12	F5	1	..	37388i
43	882	13.2	+54 9	6.75	7.53	G5	6	5,7	37407i	93	873	13.5	+14 23	8.1	8.2	A3	3	..	37567i
44	1257	13.2	+39 14	7.84	9.02	K5	4	..	37365i	94	881	13.5	+ 5 54	10.0	10.1	A2	3	..	38410b
45	776	13.2	+28.41	9.1	9.1	B9	2	..	37525i	95	853	13.5	- 1 14	9.4	9.4	Ao	2	..	12391b
46	856	13.2	+13 29	7.5	7.5	B9	7	..	37567i	96	1218	13.5	- 5 46	7.09	8.09	Ko	4	0,3	17409b
47	893	13.2	+ 5 2	8.40	9.40	Ko	3	0,2	14663b	97	2598	13.5	-23 16	9.4	9.9	K2	1	..	44357b
48	895	13.2	+ 4 55	8.70	9.48	G5	4	..	14663b	98	2246	13.5	-32 27	9.4	9.4	F2	2	..	24442b
49	1003	13.2	+ 0 29	8.3	8.4	A5	5	..	37594i	99	1853	13.5	-42 37	8.4	8.5	G5	8	..	20648b
50										100	398	13.5	-60 26	9.0	9.4	F5	1	..	38371b

THE HENRY DRAPER CATALOGUE.

34600

5^h 13^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1099	m. 13.6	° +45 10	8.27	8.55	Fo	2	..	3739ii	51	335	m. 13.9	° -68 8	8.3	8.6	Fo	5	..	2054ob
2	860	13.6	+30 24	9.4	9.5	A5	2	0, I-	3892ii	52	53	13.9	-87 59	6.6	7.0	F5	8	..	15145b
3	752	13.6	+10 26	8.3	8.8	F8	5	..	38167i	53	195	14.0	+77 53	6.54	6.68	A5	8	5,8	37558i
4	919	13.6	+9 3	8.4	9.6	K5	3	5,2	3841ob	54	577	14.0	+64 2	8.0	8.5	F8	6	..	36654i
5	863	13.6	+7 42	8.8	8.9	A2	2	..	38167i	55	1255	14.0	+42 16	7.74	8.74	Ko	3	..	3894oi
6	882	13.6	+5 56	8.7	9.5	G5	3	..	3841ob	56	1146	14.0	+37 20	6.71	..	Oe5	..	0, R	18347c
7	1126	13.6	-12 36	10.4	10.4	Ao	2	..	39704b	57	865	14.0	+7 26	9.4	10.5	K2	1	..	3841ob
8	1095	13.6	-16 19	9.2	10.0	G5	2	..	39704b	58	916	14.0	+2 30	5.45	5.87	F5	8	..	37594i
9	2186	13.6	-27 14	8.4	9.2	Go	3	..	42783b	59	2189	14.0	-27 36	9.3	9.8	Ko	2	..	42783b
10	772	13.6	-55 20	8.7	9.5	G5	2	..	3970ob	60	2254	14.0	-32 51	10.0	10.0	Go	1	..	24442b
11	817	13.6	-56 16	8.5	9.3	K2	3	..	20548b	61	2253	14.0	-32 56	10.0	10.0	F	1	..	24442b
12	435	13.6	-63 21	9.6	10.6	Ko	1	..	38371b	62	1887	14.0	-39 37	9.1	9.4	Fo	3	..	42101b
13	1250	13.7	+43 19	8.0	8.0	B9	3	..	3739ii	63	438	14.0	-63 11	8.8	9.1	F2	6	..	38371b
14	920	13.7	+8 43	8.8	9.6	G5	1	..	38167i	64	..	14.0	-67 34	..	..	Pec.	..	R	76,31
15	1136	13.7	-6 21	7.59	8.15	Go	4	..	17409b	65	170	14.0	-78 53	9.3	10.3	Ko	3	0,3	20557b
16	1096	13.7	-16 18	7.6	8.6	Ko	3	..	18649b	66	319	14.1	+69 9	8.0	9.0	Ko	2	..	38112i
17	1078	13.7	-17 29	8.4	9.4	Ko	2	..	18522b	67	947	14.1	+52 6	8.6	8.9	Fo	6	..	37366i
18	1048	13.7	-18 43	8.0	9.4	Ma	2	..	1237ob	68	1262	14.1	+39 31	8.0	8.0	Ao	6	..	37365i
19	2331	13.7	-31 40	8.4	9.7	F8	4	..	24442b	69	949	14.1	+32 11	8.2	9.2	Ko	2	..	3892ii
20	436	13.7	-63 39	8.3	8.6	Fo	7	..	38371b	70	818	14.1	+24 56	8.96	8.96	A	2	..	37388i
21	437	13.7	-63 43	9.5	10.3	G5	2	..	38371b	71	825	14.1	+18 6	8.5	8.9	F5	2	..	37388i
22	745	13.8	+62 16	9.4	9.5	A2	3	E	38154i	72	855	14.1	-1 12	8.4	8.4	Ao	5	1,2	14663b
23	782	13.8	+61 40	7.8	8.6	G5	3	..	36654i	73	1061	14.1	-3 11	8.6	9.6	Ko	2	..	17409b
24	1252	13.8	+42 16	7.8	8.6	G5	2	..	3739ii	74	1121	14.1	-13 54	8.7	9.7	Ko	3	..	39704b
25	1255	13.8	+40 47	7.8	7.8	B9	4	..	3739ii	75	1129	14.1	-20 59	8.4	9.8	K2	2	3,2	44357b
26	1090	13.8	+36 32	8.2	8.0	B2	4	..	37365i	76	1128	14.1	-21 56	7.6	7.9	A2	6	2,7	44357b
27	1002	13.8	+34 19	9.47	9.47	A	2	..	37365i	77	2235	14.1	-33 32	8.0	7.9	B8	7	..	24442b
28	755	13.8	+10 37	8.8	9.6	G5	1	..	38167i	78	1433	14.1	-51 34	8.3	8.4	F2	5	..	3970ob
29	754	13.8	+10 9	9.4	9.5	A5	2	..	38167i	79	..	14.1	-69 29	Cl.	Cl.	Con.	3	R	2054ob
30	2600	13.8	-23 32	9.0	9.2	Ko	2	..	1237ob	80	1102	14.2	+46 1	9.2	9.2	Ao	3	R	3894oi
31	1760	13.8	-46 1	7.02	7.6	B9	9	..	18482b	81	1015	14.2	+33 22	9.1	9.1	B9	1	..	3892ii
32	..	13.8	-67 31	..	..	Oa	..	..	76,28	82	818	14.2	+25 4	8.36	8.42	A2	4	..	37388i
33	310	13.8	-76 15	8.8	9.8	Ko	3	..	15162b	83	755	14.2	+16 37	8.4	9.5	K2	1	..	37567i
34	1059	13.9	+51 23	7.8	8.1	F2	4	..	37366i	84	918	14.2	+3 2	8.7	9.7	Ko	2	..	14663b
35	1253	13.9	+42 24	7.47	7.47	B9	4	..	3739ii	85	1011	14.2	+1 1	8.99	8.99	Ao	3	..	14663b
36	787	13.9	+15 41	7.9	7.9	Ao	3	..	37567i	86	1219	14.2	-5 5	8.55	8.55	Ao	3	..	14664b
37	1009	13.9	+0 21	9.7	9.7	Ao	3	..	14663b	87	1150	14.2	-10 12	8.6	9.6	Ko	4	..	14664b
38	1033	13.9	-7 51	8.0	8.1	A3	4	..	14664b	88	1093	14.2	-14 7	9.1	10.1	Ko	2	..	39704b
39	1119	13.9	-9 9	9.2	9.2	B9	2	..	14664b	89	2608	14.2	-23 20	9.3	9.2	Go	2	..	1237ob
40	1149	13.9	-10 37	8.5	8.6	A2	4	..	14664b	90	2361	14.2	-25 21	7.46	8.7	Go	6	..	1237ob
41	2083	13.9	-28 16	9.6	9.2	Go	2	..	12663b	91	2363	14.2	-25 23	9.0	8.6	A2	4	..	1237ob
42	2214	13.9	-35 0	4.91	5.91	Ko	..	R	28,197	92	2306	14.2	-30 6	8.49	10.0	K2	3	..	24442b
43	2215	13.9	-35 43	10.0	10.4	Go	2	..	42101b	93	1721	14.2	-48 44	8.1	7.8	F5	6	..	12756b
44	2117	13.9	-37 7	8.4	9.4	A2	4	..	42101b	94	1654	14.2	-49 42	7.80	9.0	Ko	4	..	12756b
45	1884	13.9	-39 23	6.94	7.0	A2	5	2,8	42844b	95	445	14.2	-62 15	8.4	8.7	F2	4	..	38371b
46	1857	13.9	-42 19	9.7	9.7	Go	2	..	20648b	96	1267	14.3	+39 35	8.7	8.7	Ao	4	..	37365i
47	1766	13.9	-47 2	9.2	9.7	Go	2	..	18482b	97	1150	14.3	+37 23	9.0	9.0	Ao	2	..	37365i
48	1429	13.9	-51 23	9.1	10.1	Ko	2	..	3970ob	98	1004	14.3	+34 10	7.9	9.0	K2	2	0,3	3892ii
49	401	13.9	-67 18	4.78	6.3	Ko	..	0,6 R	28,197	99	897	14.3	+6 47	10.4	10.5	A5	2	..	3841ob
50	402	13.9	-67 41	8.8	9.6	G5	3	..	38367b	100	885	14.3	+5 33	8.8	9.4	Go	2	5,1	39685b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

34700

5^h 14^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	884	m. 14.3	° 5 4	8.76	9.04	K5	1	..	14663b	51	1131	m. 14.6	° 21 30	9.5	10.6	K2	1	..	41088b
2	1085	14.3	- 8 45	9.5	9.8	F2	2	..	14664b	52	1071	14.6	- 22 32	8.5	9.2	A5	3	..	12370b
3	1130	14.3	- 11 14	9.2	10.2	Ko	3	..	39704b	53	1703	14.6	- 50 41	9.3	9.8	F5	1	..	39700b
4	1081	14.3	- 17 40	8.0	8.3	F2	5	..	18522b	54	429	14.6	- 61 46	9.1	9.9	G5	2	..	38371b
5	2121	14.3	- 37 43	9.3	10.0	Go	3	..	42101b	55	439	14.6	- 63 16	9.5	10.1	Go	2	..	38371b
6	1970	14.3	- 38 4	9.8	9.4	F2	2	..	42101b	56	892	14.7	+ 53 32	9.2	9.2	Ao	2	..	37366i
7	1971	14.3	- 38 16	9.4	9.4	Go	2	..	42101b	57	950	14.7	+ 52 55	9.0	9.4	F5	2	..	37366i
8	1722	14.3	- 48 18	7.6	8.9	K5	4	..	12756b	58	1063	14.7	+ 51 7	8.0	8.1	A2	4	..	37366i
9	825	14.3	- 53 26	8.8	9.5	Go	3	..	39700b	59	1162	14.7	+ 41 43	5.12	4.95	B3	..	2,8R	56,79
10	776	14.3	- 55 43	9.0	9.6	G	1	..	20548b	60	1017	14.7	+ 33 17	8.8	8.8	B8	4	..	37365i
11	323	14.3	- 71 10	8.6	9.6	Ko	4	..	20540b	61	952	14.7	+ 32 29	8.2	8.2	B8	4	..	37365i
12	183	14.4	+ 81 37	8.7	9.3	G	3	..	37558i	62	758	14.7	+ 27 51	6.30	6.28	B9	7	..	36997i
13	1256	14.4	+ 48 39	8.7	9.5	G5	3	..	38940i	63	929	14.7	+ 20 44	8.7	8.7	Ao	4	..	37388i
14	999	14.4	+ 46 36	8.5	9.6	K2	2	..	38940i	64	862	14.7	- 1 39	8.3	9.3	Ko	2	..	37594i
15	1151	14.4	+ 38 2	8.6	8.9	Fo	4	..	37365i	65	1087	14.7	- 8 5	9.5	9.5	Ao	2	..	14664b
16	862	14.4	+ 30 56	9.0	9.0	A	2	..	37525i	66	1125	14.7	- 9 33	8.6	8.9	Fo	4	..	14664b
17	779	14.4	+ 28 47	8.5	9.3	G5	2	0,2	38921i	67	1123	14.7	- 13 5	8.6	9.6	Ko	3	..	39704b
18	899	14.4	+ 24 1	8.5	8.9	F5	2	..	37388i	68	691	14.7	- 52 33	7.5	8.7	Fo	7	..	39700b
19	898	14.4	+ 19 30	6.81	6.81	Aop	6	R	37388i	69	1258	14.8	+ 42 11	7.16	8.16	Ko	4	..	37391i
20	864	14.4	+ 13 27	7.7	8.2	F8	6	..	37567i	70	1271	14.8	+ 39 26	8.5	9.0	F8	4	..	37365i
21	1051	14.4	- 18 14	5.93	6.49	Go	6	..	44350b	71	1072	14.8	+ 35 12	9.47	9.42	B8	4	..	37365i
22	2168	14.4	- 29 42	8.4	9.1	G5	3	..	24442b	72	902	14.8	+ 23 56	8.2	8.5	F2	3	..	37388i
23	2257	14.4	- 32 33	9.1	10.8	Ko	1	..	24442b	73	869	14.8	+ 8 2	9.0	10.0	Ko	2	..	39685b
24	2238	14.4	- 33 33	9.4	8.6	A2	5	..	24442b	74	1221	14.8	- 4 59	7.35	7.35	Ao	5	..	37550i
25	2177	14.4	- 34 8	9.1	8.5	Go	5	..	24442b	75	1140	14.8	- 6 14	9.9	9.9	A	1	..	14664b
26	2220	14.4	- 35 28	8.8	9.4	F8	4	..	42101b	76	1126	14.8	- 9 49	7.96	7.96	Ao	7	..	14664b
27	1801	14.4	- 41 56	10.0	10.1	A2	2	..	20648b	77	1125	14.8	- 13 13	9.2	10.2	Ko	1	..	39704b
28	1971	14.4	- 44 52	10.6	10.0	Ao	3	..	20648b	78	1132	14.8	- 21 14	9.2	8.9	Ao	3	..	44357b
29	777	14.4	- 55 47	9.2	9.8	G	1	..	20548b	79	1072	14.8	- 22 5	8.2	8.4	F8	5	..	12370b
30	289	14.5	+ 73 25	8.0	8.0	Ao	5	..	37343i	80	2162	14.8	- 36 56	9.4	10.9	Go	1	..	42101b
31	899	14.5	+ 17 53	8.8	8.8	Ao	2	..	37567i	81	1776	14.8	- 43 42	7.4	8.2	F5	7	..	12756b
32	925	14.5	+ 8 36	8.7	9.5	G5	1	..	38167i	82	446	14.8	- 62 29	9.5	9.9	F5	1	..	38371b
33	1013	14.5	+ 0 45	9.0	9.0	Ao	4	..	14663b	83	..	14.8	- 69 25	..	..	Oa	..	..	76,28
34	1102	14.5	- 4 27	8.6	8.6	Ao	4	1,3	14664b	84	169	14.8	- 79 53	10.5	10.5	Ao	3	..	20557b
35	1220	14.5	- 5 33	8.6	9.4	G5	2	0,2	14664b	85	142	14.9	+ 83 17	9.2	10.4	K5	1	..	38330i
36	1036	14.5	- 7 27	8.0	8.0	B9	7	..	14664b	86	833	14.9	+ 58 51	7.75	8.53	G5	3	..	37407i
37	1124	14.5	- 9 53	9.9	9.9	Ao	4	..	14664b	87	879	14.9	+ 57 27	5.25	5.25	Ao	..	0,10	56,79
38	1070	14.5	- 22 19	8.8	9.9	Ma	1	..	12370b	88	1182	14.9	+ 44 59	7.52	7.52	Ao	5	..	37391i
39	826	14.5	- 53 4	9.1	9.6	F8	3	..	39700b	89	1259	14.9	+ 42 37	9.2	9.2	Ao	2	..	38940i
40	241	14.6	+ 74 27	7.18	7.18	Aop	6	2,5R	37343i	90	869	14.9	+ 29 29	5.72	5.72	Ao	10	0,10	37525i
41	949	14.6	+ 52 39	8.6	9.7	K2	2	..	37366i	91	901	14.9	+ 17 9	7.7	7.7	B9	6	1,3	37567i
42	1156	14.6	+ 50 24	9.0	9.3	Fo	2	..	37366i	92	881	14.9	+ 14 57	8.24	8.22	B9	4	..	37567i
43	1000	14.6	+ 46 36	9.2	10.3	K2	1	..	38940i	93	758	14.9	+ 10 47	7.44	7.44	Ao	7	E	37567i
44	900	14.6	+ 17 17	9.2	9.2	Ao	2	..	37567i	94	922	14.9	+ 2 56	9.2	9.7	F8	1	..	14663b
45	920	14.6	+ 2 25	7.7	8.2	F8	5	..	37594i	95	1133	14.9	- 11 19	9.9	10.9	Ko	1	..	39704b
46	973	14.6	+ 1 29	9.4	9.5	A5	2	..	37594i	96	1094	14.9	- 14 52	8.16	8.72	Go	5	..	39704b
47	860	14.6	- 1 13	8.2	8.2	Ao	4	..	14663b	97	1056	14.9	- 18 36	6.36	6.31	B8	7	R	1750b
48	859	14.6	- 1 31	6.42	6.25	B3	5	..	37594i	98	1055	14.9	- 18 37	6.17	6.12	B8	7	R	1750b
49	1152	14.6	- 10 51	8.6	8.9	Fo	7	5,8R	12770b	99	2173	14.9	- 28 58	8.0	8.1	A5	7	0,4	24442b
50	1153	14.6	- 10 51	8.6	8.9	Fo	7	5,8R	12770b	100	2262	14.9	- 32 25	9.0	10.3	G5	2	..	24442b

THE HENRY DRAPER CATALOGUE.

34800

5^h 14^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rep.	Pl. No.
1	2164	m. 14.9	° -36 18	9.8	10.4	Go	2	..	42101b	51	300	m. 15.3	° -75 28	7.9	8.9	Ko	6	..	15162b
2	196	14.9	-77 19	7.8	8.6	G5	5	..	15162b	52	62	15.3	-85 49	9.2	10.2	Ko	2	..	15145b
3	304	15.0	+71 6	8.5	8.5	Ao	3	..	38112i	53	989	15.4	+55 59	6.95	7.73	G5	6	5,4	37407b
4	523	15.0	+64 38	7.65	8.15	F8	4	..	36654i	54	774	15.4	+11 36	7.8	8.9	K2	2	..	37567i
5	894	15.0	+53 34	9.5	9.5	A	2	..	37366i	55	806	15.4	+9 38	6.52	6.58	A2	9	..	38167i
6	1106	15.0	+45 44	9.7	9.7	B9	2	..	38940i	56	805	15.4	+9 14	9.0	9.1	A3	1	..	38167i
7	1272	15.0	+39 28	7.38	7.44	A2	6	..	37365i	57	928	15.4	+8 35	8.8	9.9	K2	1	..	38167i
8	1011	15.0	+34 5	9.1	10.5	Mb	..	..	M	58	902	15.4	+6 3	8.3	8.6	Fo	3	0,2	39685b
9	935	15.0	+31 22	9.5	9.8	F	2	..	37525i	59	1065	15.4	-3 37	9.2	9.3	A2	2	..	12391b
10	902	15.0	+19 43	6.44	7.44	Ko	5	..	37388i	60	1105	15.4	-4 54	8.10	8.52	F5	4	..	14664b
11	790	15.0	+15 32	7.7	7.8	A5	4	..	37567i	61	1043	15.4	-7 12	8.6	8.6	Ao	3	..	14664b
12	853	15.0	+3 58	8.8	9.4	Go	2	..	14663b	62	1044	15.4	-7 19	9.2	9.2	Ao	2	..	14664b
13	1041	15.0	-7 2	8.5	8.5	Ao	4	..	14664b	63	1132	15.4	-12 25	5.29	5.17	B5	10	R	18649b
14	1042	15.0	-7 13	8.6	8.6	Ao	3	..	14664b	64	1014	15.4	-15 43	8.0	9.0	Ko	3	..	39704b
15	1134	15.0	-11 8	8.2	8.2	B8	6	1,7	12770b	65	1016	15.4	-15 57	8.6	9.4	G5	1	..	18649b
16	1127	15.0	-13 17	4.29	4.07	B1	..	R	56,79	66	1074	15.4	-22 21	9.0	9.8	Go	1	..	44357b
17	2993	15.0	-24 16	8.6	9.8	K2	3	..	12370b	67	2370	15.4	-25 13	7.22	8.9	Mb	6	..	41088b
18	2263	15.0	-32 5	8.7	10.0	K2	2	..	24442b	68	2204	15.4	-27 28	5.75	5.75	Ao	..	..	56,79
19	1436	15.0	-51 28	9.7	10.1	F5	1	..	39700b	69	2349	15.4	-31 47	9.6	10.0	G5	3	..	24442b
20	823	15.0	-56 15	9.5	9.5	Ao	4	..	20548b	70	783	15.4	-55 40	9.0	9.8	Ao	2	..	20548b
21	440	15.0	-63 2	9.5	10.5	Ko	2	..	38371b	71	375	15.4	-70 3	9.7	10.1	F5	1	..	20540b
22	291	15.0	-73 28	9.2	9.5	Fo	2	..	20540b	72	580	15.5	+63 59	8.5	8.6	A2	5	3,3	38907i
23	63	15.0	-84 9	10.1	10.2	A5	2	..	20557b	73	990	15.5	+55 20	9.5	9.5	A	2	..	37407i
24	1075	15.1	+35 32	9.8	9.8	A	2	..	37365i	74	1264	15.5	+42 33	8.9	8.9	Ao	3	..	38940i
25	954	15.1	+32 32	9.5	9.5	A	2	R	37365i	75	1100	15.5	+36 6	7.7	8.7	Ko	4	..	37365i
26	955	15.1	+32 13	8.8	9.8	Ko	1	..	37525i	76	958	15.5	+32 39	9.5	9.5	A	2	..	37365i
27	1223	15.1	-5 18	7.09	7.07	B9	5	..	37550i	77	779	15.5	+12 20	8.1	8.9	G5	2	..	37567i
28	1128	15.1	-13 42	8.6	9.2	Go	4	..	39704b	78	924	15.5	+2 27	6.66	7.44	G5	4	..	37594i
29	1777	15.1	-43 54	8.7	9.4	Fo	4	..	12756b	79	1018	15.5	+0 30	9.4	9.5	A5	4	..	14663b
30	441	15.1	-63 27	8.5	9.5	Ko	5	..	38371b	80	1225	15.5	-5 28	6.29	6.27	B9	7	..	37550i
31	895	15.2	+53 54	9.2	9.2	A	2	..	37366i	81	1143	15.5	-6 25	9.2	9.2	A	1	..	14664b
32	1274	15.2	+39 25	8.8	8.7	B5	4	..	37365i	82	1138	15.5	-11 10	8.6	9.7	K2	3	..	39704b
33	890	15.2	+5 57	9.7	9.7	Ao	2	..	39685b	83	1780	15.5	-47 29	8.9	9.2	Fo	4	..	12756b
34	891	15.2	+5 34	8.3	9.1	G5	2	..	37594i	84	320	15.5	-74 14	8.8	8.9	A2	4	..	20540b
35	1141	15.2	-5 57	8.6	8.6	B8	5	..	14664b	85	242	15.6	+74 13	6.94	6.92	B9	7	0,6	37343i
36	1805	15.2	-41 8	7.69	8.2	F5	7	..	42101b	86	351	15.6	+70 8	7.04	7.02	B9	7	..	38112i
37	1778	15.2	-43 12	9.3	9.4	A2	6	..	20648b	87	1006	15.6	+46 53	8.5	9.3	G5	3	..	38940i
38	829	15.2	-53 50	9.0	10.3	Ko	1	..	39700b	88	926	15.6	+2 50	6.74	6.88	A5	7	..	37594i
39	579	15.3	+63 17	7.27	7.83	Go	6	0,7	36654i	89	1227	15.6	-5 23	9.2	9.2	B9	3	..	14664b
40	1131	15.3	+38 54	9.4	9.4	Ao	4	..	37365i	90	1226	15.6	-5 55	9.2	9.2	Ao	3	..	14664b
41	1018	15.3	+33 17	9.8	9.9	A2	2	..	37365i	91	1145	15.6	-6 32	9.2	9.3	A2	2	..	14664b
42	957	15.3	+32 24	var.	var.	Pec.	4	R	M	92	1092	15.6	-8 7	8.0	8.3	F2	7	..	14664b
43	956	15.3	+32 17	9.0	9.0	A	2	..	37525i	93	1096	15.6	-14 5	9.7	9.8	A2	3	..	39704b
44	868	15.3	+13 39	9.0	9.8	G5	2	..	37567i	94	1076	15.6	-22 39	8.0	8.1	F5	5	..	44357b
45	872	15.3	+7 18	9.0	9.3	F2	2	..	38167i	95	2371	15.6	-25 21	9.6	9.8	Ko	3	..	41088b
46	855	15.3	+3 24	9.2	9.2	Ao	3	..	14663b	96	2146	15.6	-26 7	10.3	9.5	K	1	..	41088b
47	1059	15.3	-20 45	8.6	8.9	F5	2	5,4	44357b	97	2251	15.6	-33 49	var.	var.	Md	..	R	56,199
48	2348	15.3	-31 38	8.8	10.0	Ko	3	..	24442b	98	2167	15.6	-36 50	9.6	10.3	Go	2	..	42101b
49	2130	15.3	-37 37	9.8	10.4	Go	2	..	42101b	99	2133	15.6	-37 26	9.0	11.2	K5	1	..	42101b
50	1438	15.3	-51 25	9.9	9.8	A5	2	..	39700b	100	377	15.6	-70 41	8.7	9.0	Fo	5	..	20540b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

34900

5^h 15^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	301	15.6	-75 15	8.9	10.0	K2	1	..	15162b	51	2173	16.0	-36 50	8.0	9.1	G5	4	..	42101b
2	898	15.7	+53 28	9.0	9.1	A2	2	..	37366i	52	1812	16.0	-41 41	9.0	9.7	G5	3	..	20648b
3	1007	15.7	+46 56	7.08	8.26	K5	3	0,3	37391i	53	1717	16.0	-50 50	8.5	9.4	K2	3	..	39700b
4	1268	15.7	+40 56	5.57	5.65	A3	..	1,7-	56,79	54	432	16.0	-61 37	9.6	9.9	F2	2	..	38371b
5	939	15.7	+31 16	8.02	8.44	F5	3	..	38921i	55	748	16.1	+62 21	8.6	8.7	A2	2	..	38154i
6	793	15.7	+15 56	9.7	9.8	A3	2	..	37567i	56	1278	16.1	+39 12	8.7	9.7	Ko	2	..	37365i
7	760	15.7	+11 0	7.46	7.74	Fo	6	..	37567i	57	762	16.1	+10 14	9.02	9.58	G	1	..	38167i
8	1019	15.7	+ 0 55	8.94	9.00	A2	3	..	14663b	58	874	16.1	+ 7 34	8.7	8.8	A5	1	..	38167i
9	1228	15.7	- 5 56	8.6	9.4	G5	3	..	14664b	59	857	16.1	+ 3 54	6.41	6.24	B3	..	2,7	56,79
10	1140	15.7	-11 41	9.2	9.2	B9	3	..	39704b	60	981	16.1	+ 1 27	9.4	9.8	F5	2	..	14663b
11	3003	15.7	-24 25	9.4	9.5	Ao	3	..	12370b	61	1784	16.1	-43 41	9.2	10.4	Ko	2	..	20648b
12	2148	15.7	-26 2	7.13	7.0	F2	8	..	41088b	62	1447	16.1	-51 31	8.6	8.7	G5	4	..	39700b
13	1442	15.7	-51 19	9.7	10.1	G5	1	..	39700b	63	699	16.1	-52 53	9.9	10.7	G5	1	..	39700b
14	809	15.7	-54 34	6.96	8.3	Ko	7	..	20548b	64	452	16.1	-62 42	9.7	9.8	A5	3	..	38371b
15	450	15.7	-62 48	8.5	9.5	Ko	4	..	38371b	65	858	16.2	+ 3 42	9.0	9.0	Ao	3	..	14663b
16	325	15.7	-71 36	8.5	9.5	Ko	3	..	20540b	66	1070	16.2	- 2 57	8.6	9.6	Ko	3	..	12391b
17	783	15.8	+61 44	8.0	8.0	B9	6	..	36654i	67	1133	16.2	-13 43	8.6	9.4	G5	2	..	18649b
18	1064	15.8	+51 49	9.5	9.5	Ao	2	..	37366i	68	1135	16.2	-21 20	4.73	4.73	Ao	..	1,2 R	28,197
19	1159	15.8	+50 8	8.52	9.87	Ma	2	..	37366i	69	2108	16.2	-27 59	9.6	9.0	A	2	..	42783b
20	1108	15.8	+45 32	9.0	9.0	Ao	3	..	38940i	70	2366	16.2	-31 16	8.6	9.7	Ko	3	..	24442b
21	1160	15.8	+37 35	7.39	7.15	Bo	6	R	37365i	71	787	16.2	-55 48	8.7	9.5	K2	3	..	20548b
22	1104	15.8	+36 27	9.0	10.4	Mb	..	..	M	72	453	16.2	-62 29	9.0	9.1	A2	4	..	38371b
23	1017	15.8	+34 26	10.0	10.0	A	2	R	37365i	73	144	16.3	+83 4	9.5	10.5	Ko	2	..	38330i
24	1019	15.8	+34 5	9.5	9.5	A	2	R	37365i	74	1081	16.3	+35 35	8.6	8.6	Ao	4	..	37365i
25	1020	15.8	+33 42	9.0	8.8	B3	6	R	37365i	75	782	16.3	+28 22	8.7	8.7	A	1	..	37525i
26	831	15.8	+18 49	7.5	8.1	Go	4	0,3	37567i	76	905	16.3	+19 59	9.06	9.34	F	1	R	37388i
27	931	15.8	+ 8 5	9.7	10.3	Go	2	..	39685b	77	797	16.3	+16 0	8.4	8.4	Ao	3	..	37567i
28	904	15.8	+ 6 7	9.0	10.0	Ko	2	..	39685b	78	895	16.3	+ 5 32	9.0	9.6	Go	2	..	39685b
29	905	15.8	+ 4 23	8.5	8.5	B8	3	..	37594i	79	859	16.3	+ 3 5	9.0	9.3	Fo	3	..	14663b
30	2373	15.8	-25 43	9.4	9.2	F2	4	0,2-	41088b	80	982	16.3	+ 1 46	8.8	9.9	K2	3	..	14663b
31	2270	15.8	-32 12	9.4	9.1	B9	4	..	24442b	81	1146	16.3	-11 42	8.6	8.6	Ao	4	..	12770b
32	2256	15.8	-33 31	10.0	9.7	A3	3	..	24442b	82	1017	16.3	-14 59	9.5	9.9	F5	2	..	39704b
33	1662	15.8	-49 45	9.1	10.4	Ko	2	..	12756b	83	1081	16.3	-22 23	8.7	8.7	Ao	4	..	41088b
34	451	15.8	-62 54	9.7	10.0	Fo	2	..	38371b	84	783	16.3	-57 32	8.2	9.5	K5	3	..	20548b
35	887	15.9	+54 53	9.5	10.7	K5	..	..	M	85	1142	16.4	+47 52	9.2	9.2	B9	1	..	38940i
36	1008	15.9	+46 42	8.4	9.6	K5	1	..	38940i	86	1083	16.4	+35 37	8.7	8.7	B8	4	..	37365i
37	795	15.9	+15 45	7.4	7.7	F2	5	..	37567i	87	783	16.4	+28 41	8.7	9.2	F8	2	3,2	38921i
38	1159	15.9	-10 38	8.8	8.9	A5	5	0,4	14664b	88	906	16.4	+19 44	8.3	8.4	A2	2	..	37388i
39	1143	15.9	-11 19	10.4	10.5	A2	2	..	39704b	89	933	16.4	+ 8 20	5.71	5.52	B2	10	..	38167i
40	1099	15.9	-14 41	9.2	10.2	Ko	2	..	39704b	90	897	16.4	+ 5 47	8.3	9.5	K5	1	..	37594i
41	830	15.9	-53 30	9.0	9.6	A3	3	..	39700b	91	1231	16.4	- 5 55	7.34	7.84	F8	3	..	37550i
42	436	15.9	-64 27	9.5	10.5	K	1	..	38371b	92	1049	16.4	- 7 35	8.0	8.0	Ao	5	2,7	14664b
43	338	15.9	-68 10	8.4	9.6	K5	2	..	20540b	93	1096	16.4	- 8 24	9.2	9.2	Ao	3	..	14664b
44	378	15.9	-70 23	9.1	10.1	K	1	..	20540b	94	1100	16.4	-14 11	9.7	10.7	Ko	2	..	39704b
45	953	16.0	+52 50	8.4	8.5	A2	3	..	37366i	95	1102	16.4	-14 44	8.7	9.0	F2	3	..	18649b
46	1161	16.0	+37 17	8.7	9.5	G5	2	..	37365i	96	1082	16.4	-22 31	8.7	9.5	K2	2	..	41088b
47	1163	16.0	+37 3	9.8	9.9	A2	2	..	37365i	97	2155	16.4	-26 40	8.1	8.3	Ao	3	..	42783b
48	780	16.0	+12 34	7.8	7.9	A3	5	..	37567i	98	2141	16.4	-37 44	10.0	10.9	G5	1	..	42101b
49	1132	16.0	-13 13	9.2	10.4	K5	2	..	39704b	99	1881	16.4	-42 15	9.2	9.7	Go	3	..	20648b
50	1131	16.0	-13 29	8.0	8.8	G5	3	..	18649b	100	1667	16.4	-49 52	9.24	9.9	G	1	..	12756b

THE HENRY DRAPER CATALOGUE.

35000

5^h 16^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1273	16.5	+40 3	8.97	8.95	B9	2	..	37365i	51	762	16.8	+16 43	8.1	8.1	B8	4	..	37567i
2	1027	16.5	+34 1	9.5	9.5	B8	2	..	37365i	52	1235	16.8	- 4 59	9.30	9.80	F8	2	..	4898m
3	886	16.5	+22 4	9.5	9.6	A2	2	..	37388i	53	1163	16.8	-10 9	9.2	9.2	A0	2	..	14664b
4	783	16.5	+12 4	8.3	9.1	G5	2	..	37567i	54	1138	16.8	-21 47	8.7	8.9	F5	3	..	12370b
5	763	16.5	+10 10	8.47	9.25	G5	2	..	38167i	55	2380	16.8	-25 38	9.4	10.3	K5	2	..	41088b
6	935	16.5	+ 8 17	8.3	8.8	F8	2	..	39685b	56	2331	16.8	-30 1	8.44	8.8	F0	5	..	24442b
7	929	16.5	- 0 31	5.65	5.48	B3	..	2,8	56,79	57	403	16.8	-60 51	9.2	10.4	F8	2	..	38371b
8	872	16.5	- 1 39	7.5	7.5	B9	6	0,5	37594i	58	172	16.8	-79 56	8.98	10.8	K0	4	2,2	15162b
9	1147	16.5	-19 47	7.48	8.6	K0	4	..	18522b	59	901	16.9	+53 50	8.6	9.4	G5	2	5,1	37366i
10	524	16.6	+64 35	9.4	9.4	A0	3	..	38907i	60	1169	16.9	+37 6	8.1	8.4	F0	4	..	37365i
11	875	16.6	+59 13	8.9	9.7	G5	1	..	38907i	61	1112	16.9	+36 41	8.8	9.1	F2	2	..	37365i
12	955	16.6	+52 8	7.8	8.9	K2	2	..	37366i	62	836	16.9	+18 55	7.6	8.6	K0	4	0,3	37567i
13	1175	16.6	+41 30	8.8	8.8	A0	3	..	38940i	63	766	16.9	+10 29	9.0	9.1	A3	2	..	38167i
14	785	16.6	+29 0	8.0	9.0	K0	2	2,2	38921i	64	876	16.9	+ 7 6	7.9	8.9	K0	3	..	39685b
15	808	16.6	+ 9 58	8.72	9.22	F8	2	..	38167i	65	912	16.9	+ 6 56	8.2	8.3	A2	4	..	39685b
16	936	16.6	+ 8 9	8.3	8.6	F2	4	2,2	38410b	66	899	16.9	+ 5 18	7.16	7.58	F5	7	..	37594i
17	908	16.6	+ 6 55	7.8	8.8	K0	4	..	37594i	67	864	16.9	+ 3 28	7.7	8.9	K5	2	..	37594i
18	931	16.6	+ 2 47	9.4	9.8	F5	2	..	14663b	68	987	16.9	+ 1 16	10.0	10.3	F0	2	..	14663b
19	1222	16.6	- 2 8	8.0	8.1	A2	3	..	12391b	69	1147	16.9	-11 35	9.2	9.2	A0	4	..	39704b
20	1233	16.6	- 5 0	9.60	9.60	A0	2	..	4898m	70	3016	16.9	-24 48	10.1	9.8	F8	3	..	41088b
21	1137	16.6	-21 8	8.0	7.6	B9	8	..	12370b	71	2192	16.9	-29 18	7.14	7.4	A0	6	0,9	42783b
22	2188	16.6	-29 55	9.19	9.4	F0	3	..	24442b	72	1723	16.9	-50 42	5.52	6.6	F8	..	3,8 R	56,121
23	2276	16.6	-32 43	8.4	8.8	G5	5	..	24442b	73	785	17.0	+61 9	8.6	9.4	G5	3	E	38154i
24	1452	16.6	-51 40	7.8	8.1	K0	5	..	39700b	74	836	17.0	+58 50	8.9	10.0	K2	1	..	37407i
25	811	16.6	-54 25	8.6	9.2	F2	3	..	20548b	75	1264	17.0	+48 17	8.2	9.0	G5	2	..	38940i
26	340	16.6	-68 14	8.9	9.0	A3	4	..	20540b	76	788	17.0	+28 51	6.39	6.37	B9	7	..	36997i
27	379	16.6	-70 9	9.0	9.8	G5	1	..	20540b	77	866	17.0	+ 3 7	8.8	8.9	A5	4	2,4	14663b
28	106	16.7	+84 14	9.0	10.1	K2	3	..	38330i	78	988	17.0	+ 1 30	10.4	11.2	G5	1	..	14663b
29	173	16.7	+79 46	7.26	7.26	A0	5	0,7	37343i	79	1075	17.0	- 3 3	6.96	6.91	B8	7	..	17409b
30	581	16.7	+63 59	9.2	9.6	F5	2	..	38907i	80	1153	17.0	- 6 47	8.6	9.6	K0	1	..	4898m
31	888	16.7	+54 29	9.5	9.5	A0	1	..	38970i	81	1051	17.0	- 7 45	8.8	9.8	K0	2	0,2	4898m
32	1023	16.7	+34 3	8.8	9.1	F0	4	..	37365i	82	2650	17.0	-23 50	10.5	10.1	G0	2	..	41088b
33	948	16.7	+31 3	8.6	8.6	A0	3	1,2	37525i	83	1673	17.0	-49 49	9.04	9.3	F5	2	..	12756b
34	876	16.7	+29 37	7.76	7.74	B9	5	..	38921i	84	439	17.0	-61 35	9.0	9.6	G0	2	..	38371b
35	787	16.7	+28 22	7.36	7.44	A3	4	..	36997i	85	410	17.0	-67 38	8.9	9.0	A3	4	..	38367b
36	799	16.7	+16 1	7.38	7.38	A0	5	..	37567i	86	1166	17.1	+50 53	8.4	8.8	F5	3	..	37366i
37	875	16.7	+ 7 54	7.7	7.8	A2	7	..	38167i	87	1259	17.1	+43 48	8.9	8.9	A0	2	..	38940i
38	910	16.7	+ 7 0	7.6	7.9	F2	4	..	37594i	88	1142	17.1	+38 18	9.1	9.1	A0	4	..	37365i
39	930	16.7	- 0 29	4.65	4.48	B3	..	R	56,79	89	1113	17.1	+36 18	6.90	7.68	G5	6	..	37365i
40	1234	16.7	- 5 10	9.7	10.1	F5	2	..	4898m	90	963	17.1	+32 16	8.6	8.6	A0	2	..	38921i
41	1103	16.7	-14 15	8.0	8.6	G0	14	..	18649b	91	877	17.1	+ 7 5	8.3	9.3	K0	4	..	39685b
42	1105	16.7	-14 39	7.21	7.16	B8	6	..	18649b	92	1148	17.1	-11 51	10.1	10.7	G0	2	..	39704b
43	1018	16.7	-15 15	7.65	7.79	A5	5	..	18649b	93	456	17.1	-62 3	7.7	8.7	K0	5	..	38371b
44	2266	16.7	-33 29	9.0	10.3	F5	3	..	24442b	94	341	17.1	-68 17	8.8	8.9	A2	4	..	20540b
45	2197	16.7	-34 34	9.3	9.8	G0	2	..	24442b	95	381	17.1	-70 33	8.6	8.7	A2	7	..	20540b
46	2198	16.7	-34 48	6.42	6.7	F0	..	..	28,197	96	110	17.1	-82 41	9.5	9.8	F0	4	..	20557b
47	2143	16.7	-37 22	8.4	10.1	K2	3	..	42101b	97	749	17.2	+62 28	9.4	10.2	G5	1	..	38154i
48	784	16.7	-57 31	8.1	9.5	K2	4	..	20548b	98	890	17.2	+54 3	9.9	9.9	A	2	..	37366i
49	1145	16.8	+47 46	8.9	8.9	A0	1	..	38940i	99	1113	17.2	+45 21	9.2	9.2	A0	2	..	38940i
50	1258	16.8	+43 52	8.6	9.6	K0	1	..	38940i	100	1273	17.2	+42 31	8.6	8.6	A0	2	..	38940i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

35100

5^h 17^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1274	17.2	+42 31	8.0	8.1	A2	2	..	38940i	51	1031	17.6	+ 0 33	9.4	10.4	Ko	1	..	14663b
2	1289	17.2	+39 16	8.0	9.0	Ko	1	..	37365i	52	1032	17.6	+ 0 8	8.78	9.78	K	1	..	14663b
3	811	17.2	+ 9 8	8.4	9.4	Ko	1	..	38167i	53	874	17.6	- 1 8	9.0	9.1	A2	3	..	14663b
4	1135	17.2	-13 51	6.47	6.42	B8	7	..	18649b	54	1100	17.6	- 8 21	9.2	10.2	Ko	1	..	14664b
5	2652	17.2	-23 52	10.5	10.1	Go	1	..	41088b	55	1099	17.6	- 8 45	7.02	8.20	K5p	5	R	14664b
6	3021	17.2	-24 38	9.8	10.3	Ko	2	..	41088b	56	1110	17.6	-14 9	9.9	10.7	G5	1	..	39704b
7	358	17.2	-72 30	8.0	9.0	Ko	4	..	20540b	57	2661	17.6	-23 58	9.4	9.5	G5	2	..	41088b
8	1144	17.3	+38 28	8.4	8.3	B5	6	..	37365i	58	1801	17.6	-43 38	7.1	8.5	Mb	5	..	12756b
9	878	17.3	+29 35	8.6	9.7	K2	1	..	38921i	59	1787	17.6	-46 39	8.0	9.2	K2	3	..	12756b
10	890	17.3	+14 15	7.4	8.4	Ko	4	..	37567i	60	384	17.7	+67 34	8.4	8.5	A2	4	1,3	38112i
11	933	17.3	+ 2 53	8.1	8.1	Ao	5	..	37594i	61	1117	17.7	-16 7	8.6	8.7	A2	3	..	39704b
12	934	17.3	+ 2 31	8.3	9.1	G5	3	..	37594i	62		17.7	-24 52	5.45	6.01	Go			
13	2269	17.3	-33 43	9.6	10.3	G5	2	..	24442b	63	3023	17.7	-24 52	6.67	6.75	A3		R	56,121
14	1919	17.3	-39 51	7.27	7.9	F5	8	..	42101b	64	3024	17.7	-24 53	9.6	10.4	Ko	1	..	41088b
15	1823	17.3	-41 46	8.7	10.3	K2	2	..	20648b	65	2207	17.7	-34 26	6.12	6.4	B5p		R	28,197
16	1787	17.3	-47 8	7.5	8.8	Ma	5	..	12756b	66	2242	17.7	-35 48	9.4	10.9	G	1	..	20707b
17	703	17.3	-52 47	10.0	10.5	F8	1	..	39700b	67	409	17.7	-60 7	9.28	9.6	Ko	2	..	38371b
18	838	17.3	-53 1	9.1	9.8	Go	2	..	39700b	68	349	17.7	-69 41	9.3	9.3	Ao	4	..	20540b
19	1168	17.4	+50 17	9.5	9.5	A	1	..	37366i	69	323	17.8	+69 15	7.8	8.9	K2	1	..	38112i
20	1181	17.4	+41 44	8.2	8.1	B5	4	..	37391i	70	1012	17.8	+46 52	8.2	8.3	A2	3	4,3	37366i
21	1290	17.4	+39 33	8.7	8.8	A5	4	..	37365i	71	917	17.8	+17 14	8.2	9.3	K2	3	0,2	37567i
22	1291	17.4	+39 15	9.0	9.0	A	2	..	37365i	72	804	17.8	+15 56	8.4	8.4	A	4	R	37567i
23	1137	17.4	- 9 11	9.2	9.2	Ao	2	..	14664b	73	805	17.8	+15 55	6.94	6.89	B8	7	..	37567i
24	1107	17.4	-13 58	8.7	9.5	G5	3	..	39704b	74	879	17.8	+ 7 36	8.3	8.7	F5	3	..	38167i
25	1109	17.4	-14 41	9.5	10.6	K2	2	..	39704b	75	915	17.8	+ 6 58	8.1	8.9	G5	4	5,3	39685b
26	1020	17.4	-15 34	9.2	9.8	Go	2	..	39704b	76	873	17.8	+ 3 6	8.3	9.1	G5	3	..	14663b
27	2659	17.4	-23 55	10.5	11.0	K	1	..	41088b	77	991	17.8	+ 1 36	8.5	8.5	B9	4	..	37594i
28	2120	17.4	-28 3	8.0	9.5	Ko	2	..	42783b	78	1054	17.8	- 7 42	8.0	8.0	Ao	5	1,3	4898m
29	2338	17.4	-30 10	7.42	8.8	Ko	7	..	24442b	79	1113	17.8	-14 29	10.1	10.9	G5	1	..	39704b
30	526	17.5	+64 13	9.5	9.6	A2	1	..	38907i	80	2663	17.8	-23 32	9.4	8.9	A2	4	..	41088b
31	1069	17.5	+51 32	9.0	9.4	F5	2	..	37366i	81	2243	17.8	-35 18	8.7	9.7	Fo	3	..	42101b
32	966	17.5	+32 32	8.2	8.2	B9	4	..	38921i	82	1794	17.8	-47 37	8.1	8.8	G5	4	..	12756b
33	870	17.5	+ 3 44	8.7	9.1	F5	3	3,2	39685b	83	345	17.8	-68 34	8.9	9.0	A2	3	..	20540b
34	936	17.5	+ 2 42	7.3	7.3	Ao		0,7	56,79	84	294	17.8	-73 41	6.56	6.7	A2	8	E	9062b
35	933	17.5	+ 0 3	8.23	8.21	B9	4	..	37594i	85	198	17.9	+76 29	8.6	9.4	G5	2	..	37343i
36	1142	17.5	-12 13	8.8	9.6	G5	3	..	39704b	86	1175	17.9	+37 17	5.22	6.40	K5		0,R	18347c
37	1098	17.5	-17 42	6.94	7.94	Ko	5	..	18649b	87	826	17.9	+24 52	8.2	8.3	A2	4	2,3	37388i
38	1891	17.5	-42 50	8.6	9.1	F8	5	..	20648b	88	941	17.9	+20 29	8.8	9.3	F8	3	..	37388i
39	704	17.5	-52 8	8.0	8.7	F2	5	..	39700b	89	765	17.9	+16 36	6.09	6.15	A2		2,9	56,80
40	344	17.5	-68 14	9.5	9.6	A2	3	..	38367b	90	766	17.9	+16 24	7.7	8.3	Go	3	..	37602i
41	359	17.5	-72 11	9.0	9.5	F8	3	..	20540b	91	992	17.9	+ 1 12	7.59	8.66	K2	3	..	14663b
42	353	17.6	+70 17	8.9	9.9	Ko	2	..	38112i	92	1035	17.9	+ 0 58	6.97	6.97	Ao	8	..	14663b
43	394	17.6	+66 38	9.4	9.5	A5	2	2,1-	38112i	93	1034	17.9	+ 0 49	9.7	9.7	Ao	3	..	14663b
44	751	17.6	+62 53	9.2	9.3	A3	3	..	38154i	94	1033	17.9	+ 0 21	8.8	8.8	B9	4	..	37594i
45	903	17.6	+53 12	9.2	9.2	Ao	2	..	37366i	95	1225	17.9	- 2 15	8.6	8.6	Ao	2	..	12391b
46	839	17.6	+18 31	7.5	8.6	K2	4	3,3	37567i	96	1089	17.9	-22 32	8.6	8.7	F2	4	..	41088b
47	763	17.6	+16 55	7.9	8.4	F8	3	..	37567i	97	2345	17.9	-30 44	9.3	10.0	F8	4	..	24442b
48	872	17.6	+ 3 28	7.07	7.07	A	2	R	39685b	98	1850	17.9	-40 2	9.4	9.7	Ao	2	..	42101b
49	871	17.6	+ 3 27	4.99	4.82	B3		R	56,80	99	448	17.9	-63 5	8.1	9.1	Ko	7	..	38371b
50	990	17.6	+ 1 37	10.4	10.4	Ao	2	..	14663b	100	472	18.0	+65 10	10.2	10.2	Ao	1	..	38952i

THE HENRY DRAPER CATALOGUE.

35200

5^h 18^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1115	18.0	+45 8	8.47	8.47	Ao	4	..	3894oi	51	1169	18.3	+50 56	9.5	9.6	A2	2	..	37366i
2	1122	18.0	+36 7	6.74	7.81	K2	6	..	37365i	52	1195	18.3	+44 18	8.2	8.3	A2	2	..	37391i
3	1036	18.0	+1 2	7.69	7.67	B9	4	..	37594i	53	1264	18.3	+43 44	8.9	8.9	Ao	2	..	3894oi
4	1168	18.0	-10 35	9.2	9.7	F8	3	..	39704b	54	974	18.3	+32 45	9.0	9.8	G5	1	..	38921i
5	1169	18.0	-10 39	9.1	10.1	Ko	2	..	39704b	55	891	18.3	+22 14	9.0	9.4	F5	3	..	37388i
6	2399	18.0	-25 4	11.0	10.3	Go	2	..	41088b	56	843	18.3	+18 55	8.7	8.7	A	3	..	37388i
7	2398	18.0	-25 48	10.5	9.9	A3	2	..	41088b	57	914	18.3	+4 34	8.4	9.2	G5	2	..	37594i
8	2124	18.0	-28 14	8.6	9.5	F8	1	..	42783b	58	1040	18.3	+0 34	9.0	9.0	B8	2	..	37594i
9	2209	18.0	-34 12	8.7	9.5	K2	3	..	24442b	59	1083	18.3	-3 12	9.2	9.2	A	2	E	4898m
10	1805	18.0	-43 35	8.9	10.3	K5	1	..	20648b	60	1240	18.3	-5 15	9.2	9.3	A2	2	..	4898m
11	1457	18.0	-51 6	11.0	10.2	A	1	..	39700b	61	1105	18.3	-8 12	8.5	8.5	Ao	6	..	10366b
12	705	18.0	-52 5	9.6	10.2	Go	2	..	39700b	62	1156	18.3	-11 26	9.9	11.0	K2	2	..	39704b
13	1150	18.1	+38 17	8.6	8.9	Fo	4	..	37365i	63	1115	18.3	-14 0	10.1	10.9	G5	1	..	39704b
14	1032	18.1	+33 33	8.8	8.8	B8	4	..	37365i	64	1022	18.3	-15 7	8.80	9.30	F8	3	3,2	39704b
15	873	18.1	+30 6	9.11	9.53	F5	2	..	37525i	65	2346	18.3	-30 12	9.1	10.0	Ao	2	..	24442b
16	914	18.1	+19 55	8.25	8.67	F5	3	..	37388i	66	1461	18.3	-51 20	9.7	9.7	A2	2	..	39700b
17	788	18.1	+12 41	8.4	8.4	Ao	4	..	37567i	67	145	18.3	-80 32	7.68	8.3	F8	9	3,10	20557b
18	903	18.1	+5 36	10.4	10.5	A2	2	..	39685b	68	945	18.4	+20 3	8.45	9.45	Ko	2	..	37388i
19	1039	18.1	+0 59	10.0	10.1	A2	2	..	14663b	69	767	18.4	+16 29	8.2	8.2	Ao	5	..	37567i
20	1081	18.1	-3 1	8.6	9.7	K2	4	2,2	4898m	70	770	18.4	+10 59	7.45	7.87	F5	5	E	37567i
21	1109	18.1	-4 21	10.4	10.7	F	1	E	4898m	71	879	18.4	-1 5	8.3	8.3	Ao	6	..	14663b
22	1238	18.1	-5 25	9.2	9.2	Ao	2	..	4898m	72	1110	18.4	-4 1	9.7	10.3	Go	2	..	4898m
23	1158	18.1	-6 48	8.6	8.7	A2	6	0,3	4898m	73	1111	18.4	-4 40	9.9	11.3	Mb	..	..	M
24	1102	18.1	-7 59	9.5	9.6	A2	3	1,3	4898m	74	2296	18.4	-32 38	7.88	8.6	Ko	7	..	24442b
25	1103	18.1	-8 11	9.0	9.0	Ao	4	..	14664b	75	1685	18.4	-49 52	8.3	9.0	F8	4	..	12756b
26	2400	18.1	-25 51	10.5	9.9	A	1	..	41088b	76	173	18.4	-79 6	9.7	10.3	Go	4	0,2	15162b
27	2395	18.1	-31 41	8.0	10.0	K2	4	..	24442b	77	244	18.5	+74 20	9.0	9.0	Ao	1	..	37343i
28	1921	18.1	-39 22	9.3	9.7	A5	1	..	42101b	78	1028	18.5	+56 18	8.5	8.9	F5	4	0,3	37407i
29	1922	18.1	-39 35	7.40	8.8	Ko	5	..	42101b	79	1034	18.5	+33 56	9.4	10.2	G5	2	..	37365i
30	347	18.1	-68 41	7.6	8.6	Ko	7	..	20540b	80	1058	18.5	-7 19	9.7	9.7	Ao	2	0,2	4898m
31	350	18.1	-69 26	Cl.	Cl.	Pec.	2	R	20540b	81	1107	18.5	-8 30	5.83	5.83	Ao	9	..	10366b
32	882	18.2	+57 22	8.4	8.4	Ao	4	..	37407i	82	1139	18.5	-9 25	8.7	10.1	Ma	2	..	14664b
33	958	18.2	+52 32	9.2	9.2	A	2	..	37366i	83	1151	18.5	-21 53	9.2	9.3	A3	3	..	41088b
34	1177	18.2	+37 25	8.0	8.0	B9	4	..	37365i	84	2675	18.5	-23 20	7.6	8.3	Ko	7	..	41088b
35	1178	18.2	+37 11	8.5	8.8	Fo	4	..	37365i	85	2404	18.5	-25 40	8.2	8.9	F5	6	..	41088b
36	1033	18.2	+33 15	9.0	9.1	A2	4	..	37365i	86	2175	18.5	-26 0	9.3	9.5	Ao	4	..	41088b
37	973	18.2	+32 37	9.0	10.0	Ko	1	0,1	38921i	87	1829	18.5	-41 5	8.5	8.8	A3	4	..	42101b
38	954	18.2	+31 8	6.37	7.37	Ko	2	R	38921i	88	1998	18.5	-44 28	7.4	8.5	Ao	9	..	12756b
39	955	18.2	+31 3	5.93	5.91	B9	9	..	38921i	89	1935	18.5	-45 26	8.6	9.4	F2	5	..	12756b
40	876	18.2	+30 30	8.6	9.7	K2	1	..	38921i	90	1800	18.5	-46 22	8.9	9.2	A2	5	..	12756b
41	904	18.2	+5 44	8.1	8.4	F2	3	..	37594i	91	789	18.5	-55 10	9.2	9.2	Ao	4	..	20548b
42	905	18.2	+5 14	6.38	6.38	Ao	8	..	37594i	92	412	18.5	-67 31	9.7	10.1	F5	2	..	38367b
43	1103	18.2	-17 22	8.6	8.6	Ao	3	..	18522b	93	348	18.5	-68 27	9.2	9.2	Ao	4	..	38367b
44	1156	18.2	-19 56	8.53	8.6	Ao	3	..	18522b	94	350	18.5	-68 34	8.5	8.9	F5	4	..	20540b
45	1070	18.2	-19 58	7.88	7.6	Ao	4	..	18522b	95	1031	18.6	+34 45	6.48	7.48	Ko	6	R	37365i
46	1854	18.2	-40 51	8.4	9.4	Ko	3	..	42101b	96	920	18.6	+17 17	5.14	5.70	Go	..	5,8-	56,80
47	1795	18.2	-46 44	9.5	9.7	F8	3	..	12756b	97	941	18.6	+2 11	8.4	8.9	F8	5	..	14663b
48	382	18.2	-70 21	8.8	9.8	Ko	2	..	20540b	98	996	18.6	+2 0	7.9	7.9	B8	5	..	37594i
49	190	18.3	+78 15	7.7	7.7	Ao	5	0,6	37343i	99	936	18.6	-0 15	5.64	5.47	B3	..	1,10	56,80
50	385	18.3	+67 50	8.0	8.0	B8	4	0,4	38112i	100	2400	18.6	-31 32	8.6	9.4	F8	5	..	24442b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

35300

5^h 18^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2001	18.6	-38 35	7.92	8.8	Ko	4	..	4210rb	51	999	19.0	+ 1 41	9.0	9.0	Ao	5	..	14663b
2	411	18.6	-60 23	9.0	9.6	Go	2	..	38371b	52	1042	19.0	+ 0 7	9.4	9.5	A2	4	0,2	14663b
3	198	18.7	+77 8	8.0	9.1	K2	2	..	37558i	53	1109	19.0	- 8 22	8.6	8.6	Ao	5	..	10366b
4	1265	18.7	+43 9	8.4	9.6	K5	1	..	38940i	54	1160	19.0	-11 53	9.2	10.2	Ko	1	..	39704b
5	1041	18.7	+ 0 46	8.5	8.5	B9	4	..	37594i	55	1152	19.0	-11 58	9.2	10.0	G5	2	..	39704b
6	1173	18.7	-10 42	9.2	10.4	K5	2	..	39704b	56	1466	19.0	-51 40	7.4	7.8	Ko	8	..	39700b
7	1117	18.7	-14 55	7.91	8.91	Ko	5	0,3	39704b	57	706	19.0	-52 54	9.2	9.9	Go	1	..	39700b
8	1108	18.7	-17 18	8.4	8.4	Ao	5	..	18522b	58	445	19.0	-61 17	8.2	9.1	Ko	5	..	38371b
9	457	18.7	-62 2	9.3	9.7	F5	1	..	38371b	59	414	19.0	-67 45	10.0	10.1	A5	1	..	38367b
10	174	18.7	-79 11	9.6	10.6	Ko	3	2,2	15162b	60	353	19.0	-68 8	10.0	10.1	A3	2	..	38367b
11	325	18.8	+69 25	8.2	8.2	Ao	4	..	38112i	61	303	19.0	-75 13	9.7	9.8	A2	3	..	15162b
12	1015	18.8	+46 44	8.0	9.0	Ko	1	..	38940i	62	306	19.1	+71 50	7.7	8.7	Ko	4	..	37343i
13	1182	18.8	+37 58	7.8	7.8	Ao	8	..	37365i	63	1184	19.1	+37 53	9.0	9.0	B9	4	..	37365i
14	1034	18.8	+34 5	8.6	8.6	B8	4	..	37365i	64	793	19.1	+11 27	7.30	8.08	G5	5	E	37567i
15	948	18.8	+ 8 3	9.4	9.9	F8	2	..	39685b	65	821	19.1	+ 9 5	7.9	8.3	F5	4	..	38167i
16	917	18.8	+ 4 25	9.0	9.0	Ao	3	1,2	39685b	66	945	19.1	+ 2 28	9.2	9.3	A3	5	0,4	14663b
17	882	18.8	- 0 57	6.11	6.53	F5	6	..	37594i	67	1000	19.1	+ 1 31	9.7	9.7	Ao	1	..	14663b
18	1087	18.8	- 3 10	8.6	8.6	Ao	2	2,3	12391b	68	1165	19.1	- 5 59	8.5	9.3	G5	3	0,1	4898m
19	1061	18.8	- 6 59	8.6	9.8	K5	1	..	4898m	69	1064	19.1	- 7 53	4.21	5.21	Ko	..	5,R	56,80
20	1174	18.8	-10 30	8.0	8.0	Ao	7	0,8	14664b	70	1175	19.1	-10 5	8.81	8.81	Ao	3	..	14664b
21	2685	18.8	-23 9	9.3	8.4	A5	6	..	41088b	71	1155	19.1	-21 18	9.1	9.5	Ko	3	..	41088b
22	2254	18.8	-35 24	8.4	8.5	F2	4	E	14690b	72	1097	19.1	-22 21	9.2	9.2	Ao	5	..	41088b
23	413	18.8	-67 39	9.4	10.4	K	1	..	38367b	73	2406	19.1	-25 28	9.8	9.5	Ao	3	..	41088b
24	330	18.8	-71 37	8.0	9.0	Ko	6	..	20540b	74	2007	19.1	-44 18	10.1	10.0	A3	2	..	20648b
25	1172	18.9	+50 11	8.67	8.81	A5	2	..	37366i	75	1940	19.1	-45 11	9.7	9.7	Go	2	..	12756b
26	1035	18.9	+34 21	8.0	9.1	K2	2	..	37365i	76	795	19.1	-57 28	8.9	9.8	G5	3	..	20548b
27	1036	18.9	+34 6	6.83	7.17	F2	6	..	37365i	77	753	19.2	+62 13	9.2	10.0	G5	2	..	38907i
28	882	18.9	+30 5	8.76	8.71	B8	3	..	38921i	78	885	19.2	+30 37	9.4	9.4	Ao	3	..	38921i
29	807	18.9	+15 51	8.3	8.3	B9	3	..	37567i	79	887	19.2	+30 36	9.4	9.4	A	2	..	37525i
30	819	18.9	+ 9 24	9.0	10.0	Ko	1	..	39685b	80	795	19.2	+11 37	8.2	8.3	A2	3	E	37567i
31	882	18.9	+ 7 46	9.0	10.2	K5	1	..	39685b	81	950	19.2	+ 8 24	8.7	9.8	K2	2	..	38410b
32	998	18.9	+ 1 33	10.0	10.0	Ao	3	..	14663b	82	951	19.2	+ 8 31	9.7	9.7	A	1	..	39685b
33	1113	18.9	- 4 39	8.5	8.6	A5	6	2,4	4898m	83	884	19.2	+ 7 29	10.4	10.9	F8	1	..	39685b
34	1163	18.9	- 6 56	8.6	8.6	Ao	3	2,5	14664b	84	1125	19.2	-16 29	9.2	9.3	A3	3	..	39704b
35	1158	18.9	-11 17	8.4	8.7	Fo	4	..	12770b	85	1098	19.2	-22 7	9.7	9.8	A2	2	..	41088b
36	1150	18.9	-12 4	9.2	9.2	Ao	4	..	39704b	86	2185	19.2	-26 48	6.44	6.5	F5	7	..	42783b
37	1119	18.9	-14 1	5.17	5.00	B3	..	0,10	56,80	87	2355	19.2	-30 41	9.1	9.7	F5	3	..	24442b
38	2686	18.9	-23 43	10.5	10.1	Go	2	..	41088b	88	2303	19.2	-32 45	9.1	8.8	Ao	4	..	24442b
39	2403	18.9	-31 50	9.6	9.7	Fo	4	..	24442b	89	707	19.2	-52 33	9.2	9.7	F2	2	..	39700b
40	816	18.9	-54 29	9.0	9.6	Go	1	..	39700b	90	363	19.2	-72 49	8.1	9.3	K5	3	..	20540b
41	791	18.9	-55 51	8.5	9.5	K5	2	..	20548b	91	146	19.2	-80 18	7.89	10.0	Ko	5	0,8	20557b
42	355	18.9	-69 19	Cl.	Cl.	Con.	..	R	M	92	906	19.3	+53 31	8.1	8.4	Fo	4	0,3	37366i
43	356	18.9	-69 21	var.	var.	Pec.	..	R	76,31	93	1266	19.3	+43 52	8.9	9.4	F8	2	..	38940i
44	1155	19.0	+38 28	8.8	8.8	B9	4	..	37365i	94	769	19.3	+27 53	9.1	9.1	A	1	..	37525i
45	1095	19.0	+35 33	8.4	8.2	Bp	4	R	37365i	95	948	19.3	+20 30	6.83	6.64	B2	5	..	37388i
46	1038	19.0	+33 17	9.5	10.1	G	2	..	37365i	96	880	19.3	+ 3 26	8.3	8.6	F2	3	..	37594i
47	886	19.0	+29 32	8.5	..	Pec.	2	R	37525i	97	1141	19.3	-13 6	9.7	9.7	Ao	4	..	39704b
48	888	19.0	+29 7	8.5	9.7	K5	..	..	M	98	1026	19.3	-15 11	9.1	9.9	G5	3	..	39704b
49	923	19.0	+17 7	7.9	7.8	B5	6	3,3	37567i	99	1027	19.3	-15 33	9.2	9.7	F8	2	..	39704b
50	943	19.0	+ 2 17	9.7	9.7	Ao	4	0,3	14663b	100	1157	19.3	-21 11	9.7	10.1	G5	2	..	41088b

THE HENRY DRAPER CATALOGUE.

35400

5^h 19^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1804	19.3	-46 22	9.2	10.0	G5	2	..	12756b	51	1270	19.7	+48 57	9.2	9.2	Ao	1	..	37366i
2	413	19.3	-60 50	6.9	7.1	A2	4	2,9	20516b	52	952	19.7	+ 8 13	9.2	9.3	A3	2	..	39685b
3	449	19.3	-63 11	8.9	9.7	G5	4	..	38371b	53	888	19.7	+ 7 6	8.2	8.3	A2	4	0,2	39685b
4	888	19.4	+30 16	8.6	8.6	Ao	2	0,2	38921i	54	1046	19.7	+ 0 41	8.8	8.8	B9	3	..	37594i
5	773	19.4	+11 2	7.6	8.6	Ko	4	..	38167i	55	941	19.7	- 0 55	9.0	10.0	Ko	2	..	14663b
6	910	19.4	+ 5 44	9.0	10.0	Ko	2	..	39685i	56	1237	19.7	- 2 35	8.0	8.0	B8	6	1,4	37594i
7	947	19.4	+ 2 15	6.32	6.15	B3	..	0,8	56,80	57	1129	19.7	-16 7	8.4	9.4	Ko	3	..	39704b
8	1003	19.4	+ 1 43	8.3	8.3	Ao	3	..	14663b	58	1128	19.7	-16 32	9.2	9.2	Ao	3	..	39704b
9	1004	19.4	+ 1 43	8.1	8.1	A	4	..	14663b	59	1946	19.7	-45 31	8.5	10.2	K2	2	..	12756b
10	886	19.4	- 0 59	5.15	5.93	G5	8	5,8R	37590i	60	493	19.7	-58 13	8.2	9.3	K5	2	..	20548b
11	1235	19.4	- 2 29	3.44	3.22	B1	..	R	1055c	61	397	19.7	-66 33	8.7	9.7	Ko	3	..	38371b
12	1091	19.4	- 3 22	9.0	9.1	A2	3	3,4	12391b	62	357	19.7	-68 41	9.8	9.8	Ao	3	..	38367b
13	1166	19.4	- 6 54	8.1	8.2	A5	5	0,5-	14664b	63	356	19.7	-68 52	9.2	9.8	Go	2	..	38367b
14	1143	19.4	- 9 55	8.91	8.91	A	1	..	14664b	64	754	19.8	+62 15	9.7	9.7	Ao	2	..	38907i
15	1154	19.4	-12 13	9.2	9.8	Go	2	..	39704b	65	909	19.8	+53 26	9.5	9.5	A	1	..	37366i
16	2414	19.4	-31 50	7.45	7.9	Fo	8	..	24442b	66	1268	19.8	+43 34	8.2	8.7	F8	2	..	37391i
17	846	19.4	-53 25	7.4	8.4	Ko	6	..	20548b	67	1041	19.8	+33 48	9.1	9.2	A2	2	..	37365i
18	836	19.4	-56 37	8.4	9.2	Ko	3	..	20548b	68	919	19.8	+ 6 16	1.70	1.51	B2	..	R	28,197
19	396	19.4	-66 5	9.5	9.8	Fo	2	..	38371b	69	1244	19.8	- 5 38	9.2	9.8	Go	3	5,1	4898m
20	145	19.5	+83 21	9.7	9.7	A	2	..	38330i	70	2209	19.8	-36 28	8.4	9.2	K2	3	..	42101b
21	1029	19.5	+56 12	7.96	8.38	F5	4	0,3	37407i	71	1912	19.8	-42 26	8.3	9.4	G5	5	..	20648b
22	907	19.5	+53 41	8.8	8.8	A	4	..	37366i	72	710	19.8	-52 52	10.8	10.8	A	1	..	39700b
23	1121	19.5	+45 30	8.9	9.0	A3	2	..	37391i	73	820	19.8	-54 23	7.1	7.2	A2	10	..	20548b
24	1299	19.5	+39 33	8.4	8.4	B8	6	..	37365i	74	399	19.8	-66 10	7.2	7.5	F2	6	..	38371b
25	1040	19.5	+33 4	9.1	9.2	A5	1	..	38921i	75	1356	19.9	+49 11	7.7	7.7	Ao	4	..	37366i
26	823	19.5	+ 9 54	8.17	9.24	K2	3	..	38167i	76	1270	19.9	+43 55	7.48	8.48	Ko	3	..	37391i
27	1092	19.5	- 3 36	9.7	9.8	A2	3	..	4898m	77	1159	19.9	+38 52	8.2	8.2	Ao	6	..	37365i
28	1243	19.5	- 5 22	9.9	10.7	G5	2	..	4898m	78	892	19.9	+30 15	8.6	9.0	F5	2	..	37525i
29	1075	19.5	-20 55	9.5	9.9	K2	2	..	41088b	79	893	19.9	+29 54	8.06	8.04	B9	4	..	38921i
30	1099	19.5	-22 23	7.26	7.2	A3	7	..	41088b	80	828	19.9	+25 41	8.0	8.4	F5	4	..	37388i
31	1806	19.5	-47 9	9.0	10.5	Ko	2	..	12756b	81	951	19.9	+21 3	9.1	9.1	B9	3	..	37388i
32	848	19.5	-53 4	9.1	9.6	A2	3	..	39700b	82	953	19.9	+ 2 39	9.0	9.0	Ao	4	..	14663b
33	837	19.5	-56 21	8.8	8.7	Fo	6	..	20548b	83	1007	19.9	+ 1 5	8.17	9.52	Ma	2	..	37594i
34	364	19.5	-72 2	9.5	9.6	A3	2	..	20540b	84	1049	19.9	+ 0 52	9.2	9.2	Ao	2	..	14663b
35	197	19.5	-77 5	8.8	10.0	K5	2	..	15162b	85	1116	19.9	- 4 39	9.2	9.7	F8	2	..	4898m
36	982	19.6	+32 43	9.4	9.4	Ao	2	..	37525i	86	1068	19.9	- 7 47	9.2	10.0	G5	1	E	4898m
37	922	19.6	+19 15	8.7	8.8	A5	2	..	37388i	87	1101	19.9	-22 31	9.5	11.0	Ko	1	..	41088b
38	..	19.6	+ 1 57	..	..	Go	3	..	14663b	88	2312	19.9	-32 32	9.4	10.0	Ko	2	..	24442b
39	1005	19.6	+ 1 45	4.73	4.56	B3p	..	R	56,80	89	2298	19.9	-33 28	9.6	10.3	F5	3	..	24442b
40	1121	19.6	-13 58	10.1	10.9	G5	1	..	39704b	90	2213	19.9	-36 47	8.2	9.1	G5	4	..	42101b
41	1077	19.6	-20 49	7.8	8.6	K2	3	..	18522b	91	1938	19.9	-39 56	8.75	9.1	F2	3	..	42101b
42	2416	19.6	-31 27	9.1	10.5	Ko	3	..	24442b	92	1868	19.9	-40 5	10.0	9.7	F5	1	..	42101b
43	1748	19.6	-50 13	8.3	9.6	Ko	3	..	12756b	93	821	19.9	-54 37	8.9	9.2	F2	4	..	20548b
44	708	19.6	-52 51	8.8	10.5	Ko	1	..	39700b	94	400	19.9	-66 43	9.4	9.8	F5	2	..	38371b
45	459	19.6	-62 9	9.1	10.1	Ko	1	..	38371b	95	386	20.0	+67 8	8.0	8.1	A3	3	..	36654i
46	455	19.6	-65 42	9.4	9.5	A5	3	..	38371b	96	1152	20.0	+47 15	8.0	9.1	K2	3	..	38940i
47	355	19.6	-68 51	9.4	10.0	G	1	..	38367b	97	795	20.0	+28 31	1.78	1.73	B8	..	R	1128c
48	304	19.6	-75 10	9.5	10.0	F8	2	..	15162b	98	890	20.0	+ 7 9	8.2	8.2	Ao	3	..	38167i
49	531	19.7	+64 30	8.9	9.9	Ko	2	..	38154i	99	922	20.0	+ 4 7	8.3	8.7	F5	3	..	14663b
50	840	19.7	+58 36	8.0	8.1	A3p	6	R	37407i	100	952	20.0	+ 2 50	8.5	9.0	F8	2	..	37594i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

35500

5^h 20^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1009	m. 20.0	° 1 50	8.5	8.5	B ₉	7	..	37594i	51	1079	m. 20.4	° 20 24	9.1	10.1	K	1	..	41088b
2	1241	20.0	- 2 54	8.0	8.0	B ₈	2	..	37550i	52	1102	20.4	- 22 31	9.5	10.4	Go	1	..	41088b
3	1145	20.0	- 9 19	9.2	9.3	A ₂	2	..	14664b	53	2705	20.4	- 23 10	10.1	9.9	G ₅	2	..	41088b
4	1164	20.0	- 11 4	8.6	8.7	A ₂	3	..	12770b	54	2229	20.4	- 34 24	8.8	10.0	K ₂	1	..	14690b
5	1117	20.0	- 17 3	5.68	5.68	A ₀	..	1,9	56,80	55	1291	20.5	+ 40 34	7.7	7.7	A ₀	3	0,6	37391i
6	1078	20.0	- 20 41	9.5	9.8	F ₈	3	..	41088b	56	1044	20.5	+ 34 4	var.	var.	Nb	..	R	M
7	1159	20.0	- 21 13	9.2	9.9	K ₀	2	..	41088b	57	897	20.5	+ 30 13	9.06	9.12	A ₂	2	..	37525i
8	1160	20.0	- 21 54	9.9	10.4	A	2	..	41088b	58	831	20.5	+ 9 22	8.5	9.5	K ₀	3	..	38167i
9	2700	20.0	- 23 55	10.3	10.4	F ₅	2	..	41088b	59	916	20.5	+ 5 52	7.9	8.9	K ₀	6	5,3	38410b
10	849	20.1	+ 19 3	8.4	8.5	A ₂	3	..	37388i	60	1054	20.5	+ 0 17	9.4	9.4	A ₀	4	..	12391b
11	3059	20.1	- 24 28	9.8	9.5	A ₀	4	..	41088b	61	1121	20.5	- 3 58	9.2	9.7	F ₈	3	3,2	4898m
12	3058	20.1	- 24 37	Cl.	Cl.	Con.	3	R	41088b	62	1119	20.5	- 4 48	8.95	9.37	F ₅	3	..	4898m
13	3060	20.1	- 24 47	8.6	8.9	F ₂	5	..	41088b	63	1071	20.5	- 7 47	8.0	9.2	K ₅	3	0,2	14664b
14	2313	20.1	- 32 15	8.0	9.4	K ₀	4	..	24442b	64	1167	20.5	- 11 24	8.6	8.6	B ₉	6	..	12770b
15	1940	20.1	- 39 46	5.81	7.2	Ma	..	0,8	56,121	65	1124	20.5	- 14 22	8.6	9.8	K ₅	3	..	39704b
16	461	20.1	- 62 43	9.8	10.1	F ₂	2	..	38371b	66	1103	20.5	- 22 27	9.0	9.2	F ₀	4	..	41088b
17	361	20.1	- 69 45	..	10.1	O _a	..	..	20540b	67	2231	20.5	- 34 31	7.5	7.7	A ₃	8	..	14690b
18	399	20.2	+ 66 9	8.0	8.8	G ₅	3	..	36654i	68	441	20.5	- 64 26	8.1	8.5	F ₅	6	..	38371b
19	1102	20.2	+ 35 23	6.30	7.37	K ₂	8	..	37365i	69	365	20.5	- 72 5	8.8	9.8	K	1	..	20540b
20	1040	20.2	+ 34 18	5.85	5.85	A ₀	10	..	37365i	70	199	20.6	+ 77 52	8.6	9.6	K ₀	2	..	37558i
21	1045	20.2	+ 33 11	6.30	7.30	K ₀	6	..	37365i	71	894	20.6	+ 54 52	8.6	8.6	B ₉	3	..	37366i
22	813	20.2	+ 15 23	7.04	7.02	B ₉	5	..	37567i	72	1178	20.6	+ 50 52	8.8	8.8	A ₀	2	..	37366i
23	914	20.2	+ 5 19	10.0	10.4	F ₅	2	..	39685b	73	1203	20.6	+ 44 5	7.8	8.9	K ₂	2	..	38940i
24	1242	20.2	- 2 32	8.6	9.0	F ₅	4	..	12391b	74	831	20.6	+ 24 56	8.31	8.45	A ₅	3	..	37388i
25	1117	20.2	- 8 48	9.2	9.3	A ₃	3	..	14664b	75	889	20.6	- 1 35	7.3	7.1	B ₃	8	..	37594i
26	1164	20.2	- 19 18	9.1	8.9	A ₀	2	..	18522b	76	1081	20.6	- 20 44	9.0	10.1	K ₀	2	..	41088b
27	2316	20.2	- 32 9	8.5	9.7	G ₅	3	..	24442b	77	2367	20.6	- 30 25	9.1	9.4	F ₅	2	..	14690b
28	2176	20.2	- 37 25	6.87	7.4	G ₅	8	..	42101b	78	2276	20.6	- 35 14	8.00	8.8	K ₂	4	..	14690b
29	450	20.2	- 63 38	8.5	9.5	K ₀	4	..	38371b	79	2275	20.6	- 35 53	8.4	9.1	K ₀	3	..	14690b
30	757	20.3	+ 62 21	8.6	8.7	A ₂	2	..	38907i	80	840	20.6	- 56 14	6.20	6.1	B ₉	8	..	42933b
31	985	20.3	+ 32 28	9.0	9.1	A ₂	2	..	37525i	81	367	20.6	- 72 48	9.4	10.4	K ₀	1	..	15167b
32	775	20.3	+ 16 36	6.18	6.01	B ₃	..	0,6	56,80	82	476	20.7	+ 65 50	9.2	9.8	Go	3	..	38112i
33	814	20.3	+ 15 35	7.48	7.48	A ₀	6	R	37567i	83	759	20.7	+ 62 59	5.75	6.93	K ₅	6	..	36654i
34	830	20.3	+ 9 9	8.3	9.5	K ₅	3	..	38167i	84	886	20.7	+ 57 48	9.0	9.4	F ₅	2	..	37407i
35	891	20.3	+ 7 45	8.8	9.3	F ₈	3	..	39685b	85	1206	20.7	+ 44 50	7.72	8.72	K ₀	3	..	37391i
36	1178	20.3	- 10 25	5.90	7.08	K ₅	5	5,8	37550i	86	771	20.7	+ 27 32	7.8	8.3	F ₈	3	..	36997i
37	439	20.3	- 64 11	8.1	8.9	G ₅	5	..	38371b	87	891	20.7	+ 3 44	9.0	9.0	A ₀	4	..	14663b
38	418	20.3	- 67 16	10.3	10.3	A	2	..	38367b	88	1056	20.7	+ 0 25	6.02	5.85	B ₃	9	..	37594i
39	132	20.3	- 81 11	9.4	10.6	K ₅	3	..	20557b	89	1245	20.7	- 2 7	8.6	9.6	K ₀	4	..	12391b
40	187	20.4	+ 81 19	8.7	9.0	F ₂	3	..	37558i	90	1245	20.7	- 5 14	8.6	9.6	K ₀	3	..	4898m
41	583	20.4	+ 63 29	8.6	9.6	K ₀	2	..	38154i	91	1157	20.7	- 12 38	6.72	7.50	G ₅	5	..	18649b
42	1274	20.4	+ 48 18	7.22	8.22	K ₀	2	..	37366i	92	1085	20.7	- 18 49	8.4	9.5	K ₂	3	..	18522b
43	1273	20.4	+ 48 9	6.71	7.89	K ₅	3	3,3	37391i	93	1166	20.7	- 19 27	6.94	7.0	A ₀	5	0,8	44350b
44	1272	20.4	+ 43 17	6.75	6.75	A ₀	6	..	37391i	94	2246	20.7	- 27 56	8.4	9.5	K	1	..	12663b
45	1140	20.4	+ 36 26	9.0	9.0	A ₀	4	..	37365i	95	1958	20.7	- 45 7	8.48	8.5	B ₉	6	..	12756b
46	1041	20.4	+ 34 41	8.5	8.5	B ₈	4	..	37365i	96	1472	20.7	- 51 25	8.3	8.1	A ₂	7	..	39700b
47	894	20.4	+ 30 23	8.6	9.7	K ₂	1	0,1	38921i	97	113	20.7	- 82 49	9.5	9.9	F ₅	3	..	20557b
48	945	20.4	- 0 38	6.25	6.23	B ₉	8	..	37594i	98	355	20.8	+ 70 44	8.0	8.8	G ₅	3	..	38112i
49	1179	20.4	- 10 1	8.86	8.86	A ₀	3	2,2	14664b	99	1291	20.8	+ 42 16	8.2	8.3	A ₂	3	..	38940i
50	1080	20.4	- 20 20	9.7	10.1	K ₀	1	..	41088b	100	898	20.8	+ 30 7	5.72	5.70	B ₉	8	R	36997i

THE HENRY DRAPER CATALOGUE.

35600

5^h 20^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	897	20.8	+29 50	8.0	9.2	K5	2	3,1	38921i	51	842	21.1	-56 55	8.1	9.2	K5	4	..	20548b
2	832	20.8	+9 27	9.0	9.0	Ao	2	..	39685b	52	1051	21.2	+34 42	8.4	8.2	B	3	R	37365i
3	2016	20.8	-38 9	8.0	9.7	Ko	2	..	42101b	53	1049	21.2	+33 52	7.50	7.28	B1	6	..	37365i
4	1701	20.8	-49 28	7.8	8.7	Ko	5	..	12756b	54	974	21.2	+31 58	9.0	9.1	A2	2	..	37525i
5	322	20.8	-74 10	8.7	8.7	Ao	5	..	20540b	55	962	21.2	+8 4	8.3	9.3	Ko	2	..	38167i
6	585	20.9	+63 52	8.6	9.1	F8	3	..	36654i	56	923	21.2	+6 47	6.39	6.37	B9	7	..	37594i
7	884	20.9	+60 11	6.85	6.85	Ao	6	0,7	36654i	57	1063	21.2	+0 43	8.8	8.8	B9	4	..	37594i
8	988	20.9	+33 2	9.5	9.5	A	2	..	37365i	58	1097	21.2	-3 9	8.6	8.6	Ao	4	0,3	4898m
9	972	20.9	+32 1	9.4	9.4	Ao	2	..	37525i	59	1075	21.2	-7 3	8.6	8.7	A3	5	2,7	4898m
10	901	20.9	+30 54	9.0	9.8	G5	1	..	37525i	60	1153	21.2	-9 10	8.0	8.4	F5	5	0,3	14664b
11	778	20.9	+16 9	7.32	7.66	F2	6	..	37567i	61	1130	21.2	-14 6	8.09	8.87	G5	1	..	18649b
12	1058	20.9	+0 45	8.8	8.8	B8	4	..	37594i	62	1139	21.2	-16 3	8.6	9.2	Go	3	..	39704b
13	1057	20.9	+0 39	9.4	9.4	Ao	4	..	14663b	63	2372	21.2	-30 14	8.8	9.7	Go	2	..	14690b
14	1246	20.9	-5 43	8.6	9.2	Go	3	..	4898m	64	2439	21.2	-31 35	8.4	9.7	G5	3	..	24442b
15	1150	20.9	-9 38	8.0	9.0	Ko	7	5,5	14664b	65	360	21.2	-68 5	8.4	9.2	G5	4	..	38367b
16	2018	20.9	-38 21	8.1	8.8	Fo	4	..	42101b	66	323	21.2	-74 48	7.83	8.9	Ko	5	..	15162b
17	1850	20.9	-41 3	8.7	10.3	G5	2	..	20648b	67	896	21.3	+54 5	7.99	8.99	Ko	5	5,3	37366i
18	1296	21.0	+40 17	8.6	8.6	A	4	R	37365i	68	1199	21.3	+38 1	8.6	8.6	B9	2	..	37365i
19	1046	21.0	+34 41	9.0	8.8	Bo	3	..	37365i	69	1052	21.3	+34 49	8.5	9.5	K	2	R	37365i
20	1048	21.0	+34 24	5.26	6.26	Ko	10	R	37365i	70	1052	21.3	+33 24	8.8	8.8	B8	2	R	38921i
21	973	21.0	+31 19	8.4	8.4	B8	2	..	37525i	71	928	21.3	+17 53	5.31	5.14	B3	..	0,8-	56,80
22	958	21.0	+8 55	7.7	7.7	Ao	8	..	38167i	72	963	21.3	+8 16	8.5	9.5	Ko	2	..	39685i
23	959	21.0	+8 10	7.8	7.8	Ao	5	..	39685i	73	961	21.3	+2 51	7.3	7.3	B9	..	0,8	56,80
24	960	21.0	+2 52	9.0	9.1	A5	2	..	37594i	74	1131	21.3	-14 38	9.2	10.3	K2	2	..	39704b
25	1011	21.0	+1 49	9.4	9.4	Ao	3	..	14663b	75	3074	21.3	-24 47	9.6	10.3	K2	2	..	41088b
26	1123	21.0	-4 53	9.5	10.5	Ko	1	..	4898m	76	2238	21.3	-34 19	8.2	8.5	G5	5	..	14690b
27	1175	21.0	-6 27	7.49	7.99	F8	6	0,2	4898m	77	2022	21.3	-38 13	9.0	9.7	G5	1	..	42101b
28	1126	21.0	-14 13	8.0	8.4	F5	3	..	18649b	78	1830	21.3	-43 42	7.4	8.7	K5	3	..	12756b
29	1128	21.0	-14 31	9.2	10.2	Ko	2	..	39704b	79	384	21.3	-70 50	9.2	9.2	Ao	4	..	20540b
30	1137	21.0	-16 41	8.8	10.2	Ma	2	..	39704b	80	586	21.4	+63 33	9.2	9.8	Go	1	..	38154i
31	1827	21.0	-43 48	9.2	9.3	A5	3	..	20648b	81	1053	21.4	+33 41	6.57	6.99	F5	8	..	37365i
32	1072	21.1	+51 41	8.5	9.3	G5	2	..	37366i	82	924	21.4	+6 49	9.7	9.8	A5	3	..	39685b
33	1049	21.1	+34 27	8.6	8.4	Bo	3	..	37365i	83	928	21.4	+4 41	9.4	10.0	Go	2	..	39685b
34	902	21.1	+30 49	8.7	9.7	Ko	1	..	37525i	84	927	21.4	+4 24	9.4	9.7	Fo	1	..	39685b
35	893	21.1	+13 31	7.7	7.7	B9	8	..	37567i	85	1186	21.4	-10 50	8.0	8.0	B9	9	..	12770b
36	835	21.1	+9 37	9.0	9.4	F5	3	..	38167i	86	1170	21.4	-11 0	9.0	10.2	K5	2	..	39704b
37	960	21.1	+8 22	9.4	10.4	Ko	1	..	39685b	87	1165	21.4	-21 21	9.5	10.7	Ko	1	..	41088b
38	898	21.1	+3 46	7.7	8.1	F5	4	..	37594i	88	2209	21.4	-26 51	9.8	9.2	A2	1	..	12663b
39	1060	21.1	+0 59	8.59	9.66	K2	1	..	14663b	89	1825	21.4	-47 26	8.0	8.1	F2	6	..	12756b
40	1247	21.1	-5 37	6.13	6.11	B9	7	..	3750i	90	1165	21.5	+38 13	8.4	8.5	A3	6	..	37365i
41	1176	21.1	-6 5	8.0	9.2	K5	3	0,2	4898m	91	1200	21.5	+37 9	8.6	9.4	G5	4	..	37365i
42	1185	21.1	-10 22	8.6	9.8	K5	2	..	14664b	92	853	21.5	+18 39	8.7	8.7	Ao	2	..	37567i
43	1148	21.1	-13 12	8.0	8.3	Fo	5	..	18649b	93	822	21.5	+15 11	6.13	6.19	A2	..	2,9	56,80
44	1129	21.1	-14 34	9.9	9.9	Ao	2	..	39704b	94	895	21.5	+8 0	7.5	8.5	Ko	4	..	38167i
45	1170	21.1	-19 22	9.1	9.5	G5	1	..	18522b	95	927	21.5	+6 24	8.8	9.4	Go	3	..	39685b
46	1105	21.1	-22 37	9.2	10.4	Ko	2	..	41088b	96	899	21.5	+4 0	7.5	8.1	Go	4	..	37594i
47	2716	21.1	-23 16	8.6	8.6	Ao	6	..	41088b	97	1125	21.5	-4 14	9.9	10.4	F8	2	..	4898m
48	2436	21.1	-31 53	8.2	10.0	K2	3	..	24442b	98	1149	21.5	-12 59	7.8	8.8	Ko	5	..	39704b
49	2021	21.1	-38 39	9.4	9.7	Go	1	..	42101b	99	1167	21.5	-21 21	9.7	10.7	Ko	1	..	41088b
50	1951	21.1	-39 4	10.0	10.3	K2	2	..	42101b	100	2729	21.5	-23 41	11.0	11.6	G	1	..	41088b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

35700

5^h 21^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3078	21.5	-24 54	9.60	9.9	F5	2	..	41088b	51	1171	21.8	-11 37	9.2	10.2	Ko	2	..	39704b
2	2444	21.5	-31 54	8.8	10.0	G5	2	..	24442b	52	1132	21.8	-14 1	8.6	9.1	F8	2	..	18649b
3	463	21.5	-59 44	8.3	8.5	G5	6	..	38371b	53	1036	21.8	-15 33	9.5	9.6	A3	2	..	39704b
4	361	21.5	-68 27	9.1	10.1	Ko	2	..	38367b	54	1106	21.8	-22 49	8.4	9.2	Ko	4	..	41088b
5	333	21.5	-71 4	8.7	9.5	G5	5	..	20540b	55	2733	21.8	-23 0	9.8	9.5	Go	2	..	41088b
6	1358	21.6	+49 6	7.8	8.8	Ko	2	..	38940i	56	2230	21.8	-36 36	7.6	8.8	G5	4	..	20707b
7	993	21.6	+32 27	8.7	9.0	Fo	2	..	38921i	57	454	21.8	-63 0	7.8	8.8	Ko	5	..	38371b
8	847	21.6	+21 51	4.83	4.66	B3	..	O, R	56,80	58	116	21.8	-82 24	9.5	9.8	Fo	3	..	20557b
9	855	21.6	+18 25	8.5	8.6	A2	2	..	37388i	59	532	21.9	+64 15	8.2	8.8	Go	4	..	36654i
10	929	21.6	+17 11	9.0	9.5	F8	1	..	37567i	60	1158	21.9	+47 56	7.8	8.6	G5	2	..	37391i
11	896	21.6	+13 57	8.3	8.3	Ao	4	..	37567i	61	1298	21.9	+42 12	6.76	7.54	G5	4	..	37391i
12	807	21.6	+11 27	7.8	8.2	F5	4	..	38167i	62	903	21.9	+3 45	6.61	6.44	B3	..	O, 8	56,80
13	836	21.6	+9 38	9.7	9.7	Ao	3	..	39685b	63	1133	21.9	-14 8	8.0	8.3	F2	4	..	18649b
14	896	21.6	+7 5	7.6	7.6	Ao	6	..	37594i	64	2028	21.9	-38 53	10.4	9.7	F5	2	..	42101b
15	962	21.6	+3 0	4.66	4.47	B2	..	R	56,80	65	2036	21.9	-44 19	5.90	7.4	Ko	..	O, 9	56,121
16	1015	21.6	+1 59	8.5	8.5	B9	6	..	14663b	66	1970	21.9	-45 27	8.7	8.5	Fo	5	..	12756b
17	1128	21.6	-4 20	9.2	9.8	Go	2	..	4898m	67	334	21.9	-71 38	9.1	9.2	A3	6	..	20540b
18	1251	21.6	-5 43	8.6	8.6	Ao	4	O, 4	4898m	68	995	22.0	+32 48	8.6	9.1	F8	4	..	37365i
19	1076	21.6	-7 22	9.2	9.2	A	2	..	4898m	69	912	22.0	+22 52	8.5	9.3	G5	2	..	37388i
20	1035	21.6	-15 33	8.2	9.0	G5	4	O, 1	39704b	70	826	22.0	+15 48	5.51	5.51	Ao	..	O, 10	56,80
21	1141	21.6	-16 43	8.6	9.2	Go	4	..	39704b	71	914	22.0	+14 3	8.3	8.3	Ao	3	..	37567i
22	1172	21.6	-19 45	8.6	9.0	F5	3	..	44350b	72	932	22.0	+5 1	8.60	9.38	G5	2	..	39685b
23	2375	21.6	-30 43	8.8	10.0	Ko	3	..	14690b	73	930	22.0	+4 55	9.7	9.7	A	3	..	39685b
24	2024	21.6	-38 8	8.7	9.7	F5	2	..	42101b	74	931	22.0	+4 6	9.7	9.8	A2	2	..	39685b
25	1928	21.6	-42 45	9.7	9.8	F8	3	..	20648b	75	965	22.0	+2 16	6.53	7.53	Ko	..	5, 6	56,80
26	842	21.7	+58 37	8.6	9.4	G5	1	..	38907i	76	896	22.0	-1 9	7.9	8.2	F2	5	..	37594i
27	1124	21.7	+46 0	9.7	9.8	A2	2	..	38940i	77	1250	22.0	-2 27	6.56	6.44	B5	6	2, 8	37550i
28	1149	21.7	+36 41	9.0	9.0	Ao	2	..	37365i	78	1132	22.0	-4 23	8.7	9.8	K2	3	3, 2	4898m
29	794	21.7	+12 45	8.4	8.5	A3	2	..	37567i	79	1181	22.0	-6 37	9.2	9.7	F8	3	3, 2	4898m
30	901	21.7	+3 32	7.7	7.5	B3	..	5, 6	56,80	80	1176	22.0	-19 35	9.0	8.9	F2	3	..	18522b
31	949	21.7	-0 43	9.4	9.4	Ao	2	..	14663b	81	1834	22.0	-43 15	8.9	10.2	Ma	2	..	20648b
32	1131	21.7	-4 8	9.2	9.5	F2	3	2, 3	10366b	82	859	22.0	-53 31	7.3	7.5	A2	8	..	20548b
33	1130	21.7	-4 17	9.9	9.9	Ao	2	O, 2	4898m	83	193	22.1	+78 18	7.7	8.2	F8	4	O, 4	37558i
34	1162	21.7	-12 57	10.4	10.4	Ao	4	..	39704b	84	1160	22.1	+47 33	8.7	8.7	Ao	3	..	38940i
35	1089	21.7	-18 44	9.5	9.5	Ao	2	..	18522b	85	915	22.1	+14 59	8.50	8.48	B9	4	..	37567i
36	1173	21.7	-19 47	5.79	6.7	F5	7	..	44350b	86	810	22.1	+11 24	7.9	8.9	Ko	3	..	38167i
37	2241	21.7	-34 57	7.36	7.9	G5	6	..	14690b	87	897	22.1	+7 39	9.7	9.8	A5	1	..	39685b
38	2026	21.7	-38 58	8.7	8.8	F5	4	..	42101b	88	933	22.1	+4 11	7.7	8.7	Ko	4	..	37594i
39	1930	21.7	-42 32	8.0	9.4	Ko	6	..	20648b	89	905	22.1	+3 45	9.0	9.0	Ao	3	..	37594i
40	801	21.7	-55 41	9.1	9.5	Ko	2	..	20548b	90	966	22.1	+2 8	8.8	8.8	Ao	4	O, 3	14663b
41	912	21.8	+53 20	7.04	7.32	Fo	6	2, 5	37407i	91	1017	22.1	+1 31	9.2	9.2	B9	3	..	37594i
42	1057	21.8	+34 37	6.75	7.75	Ko	6	..	37365i	92	897	22.1	-1 27	7.7	7.5	B3	6	..	37594i
43	906	21.8	+30 34	8.4	9.4	Ko	2	O, 2	38921i	93	1102	22.1	-3 0	9.7	9.7	A	2	..	4898m
44	916	21.8	+23 13	7.8	7.8	B9	3	..	37388i	94	1152	22.1	-13 56	7.09	7.09	Ao	..	O, 7	56,80
45	856	21.8	+18 40	9.4	9.4	A	1	..	37567i	95	1037	22.1	-15 13	8.4	9.4	Ko	5	5, 2	39704b
46	824	21.8	+15 58	7.7	7.7	B9	5	..	37567i	96	1085	22.1	-20 48	7.34	7.7	A3	6	1, 5	18522b
47	928	21.8	+6 54	8.8	9.4	Go	3	..	39685b	97	2038	22.1	-44 35	9.2	9.6	F8	3	..	20648b
48	1016	21.8	+1 14	9.4	10.2	G5	2	..	14663b	98	134	22.1	-81 39	6.48	8.2	G5	8	..	20557b
49	1068	21.8	+0 34	10.4	11.0	Go	2	..	14663b	99	1300	22.2	+42 9	8.6	8.7	A3	2	..	38940i
50	1180	21.8	-6 35	8.6	9.8	K5	3	O, 2	4898m	100	1202	22.2	+37 42	8.4	8.4	Ao	4	..	38124i

THE HENRY DRAPER CATALOGUE.

35800

5^h 22^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1060	22.2	+34 47	8.8	9.9	K2	..	..	M	51	1146	22.5	-16 24	8.0	8.0	Ao	4	..	18649b
2	931	22.2	+17 10	6.04	7.22	K5	..	0.6	56,80	52	1111	22.5	-22 39	9.0	9.9	Ko	2	..	41088b
3	917	22.2	+14 56	8.29	8.27	B9	4	..	37567i	53	3087	22.5	-24 27	8.4	9.8	Ko	4	..	41088b
4	898	22.2	+7 50	9.4	9.5	A2	2	..	39685b	54	2337	22.5	-32 36	7.56	8.2	Ko	7	..	24442b
5	926	22.2	+5 31	8.5	8.5	Ao	7	0.4	38410b	55	2235	22.5	-36 15	8.7	9.4	F8	1	..	20707b
6	1075	22.2	+0 57	10.0	11.0	Ko	1	..	12391b	56	1870	22.5	-41 34	9.0	10.3	Ko	2	..	20648b
7	1103	22.2	-3 1	9.5	9.5	Ao	4	2.3	12391b	57	1775	22.5	-50 35	8.9	9.3	Go	4	..	12756b
8	1256	22.2	-5 3	9.5	9.5	Ao	3	2.2	4898m	58	1489	22.5	-51 4	8.4	8.7	F8	4	..	39700b
9	1040	22.2	-15 50	8.6	8.6	Ao	4	..	18649b	59	717	22.5	-52 24	6.8	7.3	Ao	4	..	20643b
10	2436	22.2	-25 13	9.3	10.1	Ko	3	..	41088b	60	718	22.5	-52 25	6.32	6.8	Ao	8	R	20643b
11	2336	22.2	-32 18	6.92	8.2	Ko	8	..	24442b	61	..	22.5	-68 4	Neb.	Neb.	Pd	..	R	76,21
12	500	22.2	-58 5	9.3	9.3	Ao	3	..	20548b	62	363	22.5	-68 10	8.9	9.5	Go	3	..	38367b
13	465	22.2	-62 19	8.0	9.1	K2	4	..	38371b	63	390	22.6	+67 56	6.92	7.20	Fo	6	..	36654i
14	..	22.2	-68 3	Neb.	Neb.	Pec.	..	R	76,21	64	915	22.6	+53 5	7.7	8.0	Fo	3	2.3	37407i
15	762	22.3	+62 55	7.46	7.46	Ao	4	..	36654i	65	783	22.6	+16 32	7.9	7.9	B9	7	..	37567i
16	996	22.3	+32 25	9.0	10.4	Mb	..	..	M	66	927	22.6	+5 57	9.4	9.5	A2	2	..	39685b
17	852	22.3	+21 22	9.4	9.8	F5	2	..	37388i	67	958	22.6	-0 20	8.7	8.7	B9	4	..	37594i
18	797	22.3	+12 50	7.7	7.7	Ao	5	..	37567i	68	1185	22.6	-6 42	9.2	9.3	A5	2	..	4898m
19	812	22.3	+11 39	8.8	8.8	A	2	..	38167i	69	1192	22.6	-10 46	8.6	9.6	Ko	3	..	39704b
20	969	22.3	+8 30	8.3	8.8	F8	3	..	38167i	70	1087	22.6	-19 58	9.5	9.8	F8	3	..	41088b
21	935	22.3	+4 45	8.3	9.3	Ko	3	2.1	39685b	71	1169	22.6	-21 45	9.0	10.1	Ko	3	..	41088b
22	1133	22.3	-4 31	9.2	10.3	K2	1	..	4898m	72	2342	22.6	-32 32	9.4	9.4	G5	2	..	24442b
23	2380	22.3	-30 46	8.4	9.4	Go	4	..	14690b	73	2329	22.6	-33 15	8.8	10.3	Ko	1	..	14690b
24	2291	22.3	-35 27	8.7	7.9	F5	8	..	14690b	74	1836	22.6	-47 11	8.3	8.5	F5	6	..	12756b
25	2290	22.3	-35 41	9.0	8.8	Fo	4	..	14690b	75	719	22.6	-52 43	8.3	8.7	A3	5	..	20548b
26	1867	22.3	-41 27	7.6	9.2	Ko	5	..	20648b	76	807	22.6	-57 18	10.0	10.1	A5	1	..	20548b
27	501	22.3	-58 32	8.3	9.3	K2	4	..	20548b	77	105	22.6	-83 59	6.77	7.4	F5	10	..	20557b
28	198	22.3	-77 1	8.7	9.3	Go	6	..	15162b	78	1133	22.7	+35 49	8.6	9.4	G5	4	..	37365i
29	994	22.4	+55 16	9.5	9.5	A	2	..	37407i	79	920	22.7	+23 53	8.5	9.0	F8	2	..	37388i
30	1020	22.4	+46 29	8.5	8.9	F5	2	..	37391i	80	799	22.7	+12 10	8.4	8.4	Ao	2	..	37567i
31	998	22.4	+32 5	9.1	10.3	K5	..	..	M	81	1082	22.7	+1 2	7.69	7.67	B9	4	..	37594i
32	914	22.4	+22 40	7.7	8.7	Ko	3	..	37388i	82	901	22.7	-1 53	7.87	7.82	B8	4	..	37594i
33	782	22.4	+16 23	7.12	7.68	Go	6	0.3	37567i	83	1135	22.7	-4 5	9.9	10.7	G5	2	..	4898m
34	1078	22.4	+1 2	7.59	7.57	B9	5	..	37594i	84	1259	22.7	-5 19	8.38	9.56	K5	3	0.2	4898m
35	1077	22.4	+0 37	8.4	9.0	Go	2	..	37594i	85	1081	22.7	-7 1	9.2	9.2	Ao	2	..	4898m
36	1076	22.4	+0 11	9.4	9.5	A2	3	..	12391b	86	1136	22.7	-14 46	9.0	9.6	Go	3	0.1	39704b
37	1134	22.4	-4 21	9.2	10.0	G5	3	..	4898m	87	1147	22.7	-16 37	7.42	7.84	F5	5	..	18649b
38	1134	22.4	-14 22	8.8	9.2	F5	3	..	39704b	88	1135	22.7	-17 42	9.5	9.6	A5	1	..	18522b
39	1145	22.4	-16 34	8.6	8.7	A2	4	..	18522b	89	1171	22.7	-21 23	10.1	11.0	Go	1	..	41088b
40	1179	22.4	-19 29	10.1	9.5	F5	1	..	18522b	90	3091	22.7	-24 2	10.3	10.4	G5	2	..	41088b
41	1109	22.4	-22 34	8.8	8.9	F5	4	..	41088b	91	2198	22.7	-37 6	9.0	9.5	F5	2	..	20707b
42	2197	22.4	-37 25	8.7	9.1	Ao	3	..	20707b	92	1890	22.7	-40 30	9.0	10.3	G5	1	..	14691b
43	2046	22.4	-44 31	9.5	10.2	Go	2	..	20648b	93	1709	22.7	-49 1	8.7	10.2	Ko	1	..	12756b
44	828	22.4	-54 15	9.3	10.1	G5	1	..	39700b	94	356	22.8	+70 25	9.2	9.3	A2	2	..	38112i
45	502	22.4	-58 11	8.5	8.2	Fo	6	..	20548b	95	1276	22.8	+48 10	9.2	9.2	Ao	2	..	37366i
46	454	22.4	-61 44	9.1	9.1	A	3	..	38371b	96	1126	22.8	+45 44	8.20	9.20	Ko	2	..	38940i
47	362	22.4	-68 43	10.0	10.1	A3	2	..	38367b	97	1305	22.8	+42 9	9.2	9.2	Ao	3	..	38940i
48	1215	22.5	+44 44	8.9	8.9	Ao	1	..	38940i	98	1003	22.8	+32 8	7.15	7.65	F8	6	3.6	36997i
49	840	22.5	+10 1	9.22	9.50	Fo	2	..	39685b	99	1254	22.8	-2 14	7.36	7.19	B3	5	0.5	37594i
50	1169	22.5	-11 59	6.37	6.79	F5	8	..	18649b	100	1107	22.8	-3 9	9.9	10.0	A2	2	..	4898m

ANNALS OF HARVARD COLLEGE OBSERVATORY.

35900

5^h 22^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1083	22.8	— 6 58	9.2	9.2	Ao	5	0,3	4898m	51	1205	23.2	+41 13	7.6	7.6	Ao	3	..	37391i
2	2746	22.8	— 23 25	9.4	8.9	B9	6	..	41088b	52	1139	23.2	+35 53	8.7	8.7	B8	4	..	37365i
3	1839	22.8	— 43 9	8.5	8.2	A2	7	..	12756b	53	1065	23.2	+33 16	7.7	8.0	Fo	6	..	37365i
4	1779	22.8	— 50 50	10.3	9.6	A	3	..	12756b	54	778	23.2	+27 46	8.8	9.1	Fo	2	..	37525i
5	426	22.8	— 67 27	9.3	10.1	G5	3	..	38367b	55	936	23.2	+19 57	8.65	8.71	A2	3	..	37388i
6	369	22.8	— 72 11	8.6	9.8	K5	2	..	20540b	56	801	23.2	+12 29	6.81	7.31	F8	7	..	37567i
7	357	22.9	+70 6	8.59	9.59	Ko	2	..	38112i	57	1258	23.2	— 2 1	8.6	8.6	A	4	R	12391b
8	1205	22.9	+37 52	8.4	9.2	G5	4	..	37365i	58	1086	23.2	— 7 45	9.2	10.3	K2	1	..	4898m
9	903	22.9	+13 37	6.26	6.32	A2	8	..	37567i	59	2754	23.2	— 23 0	10.3	10.1	A5	3	R	41088b
10	910	22.9	+ 3 27	7.7	7.6	B5	..	0,5	56,80	60	1875	23.2	— 41 56	8.8	10.3	Ko	2	..	20648b
11	972	22.9	+ 2 18	9.4	9.7	Fo	3	0,2	39685b	61	902	23.3	+54 35	7.56	8.12	Go	5	0,4	37407i
12	1021	22.9	+ 1 13	6.37	6.20	B3	..	0,9	56,80	62	1076	23.3	+51 13	7.66	8.44	G5	4	..	37366i
13	904	22.9	— 1 2	9.4	9.5	A5	3	..	12391b	63	1164	23.3	+47 51	8.4	8.9	F8	3	..	37366i
14	1172	22.9	— 12 46	Neb.	Neb.	Pa	..	R	76,22	64	1310	23.3	+40 26	7.37	8.37	Ko	2	..	38124i
15	1182	22.9	— 19 11	8.1	8.3	Fo	6	..	18522b	65	1208	23.3	+37 34	8.4	9.2	G5	2	..	37365i
16	2443	22.9	— 25 0	8.00	9.2	Ko	6	..	41088b	66	1140	23.3	+35 38	9.5	9.5	A	2	..	37365i
17	2054	22.9	— 44 15	9.7	9.7	F8	2	..	20648b	67	857	23.3	+21 14	8.5	9.0	F8	3	..	37388i
18	468	22.9	— 62 41	7.1	7.5	F5	8	..	38371b	68	907	23.3	+13 4	7.9	8.7	G5	2	..	37567i
19	327	23.0	+69 35	7.94	8.36	F5	5	..	38112i	69	939	23.3	+ 4 52	8.55	8.55	Ao	2	..	37594i
20	1316	23.0	+39 34	8.7	8.7	Ao	2	..	37365i	70	916	23.3	+ 3 35	9.0	9.0	B8	6	..	37594i
21	1137	23.0	+35 18	6.71	6.59	B5	8	..	37365i	71	960	23.3	— 0 4	6.58	6.56	B9	8	..	37594i
22	1063	23.0	+34 46	8.8	8.8	Ao	3	..	37365i	72	961	23.3	— 0 46	9.4	9.4	Ao	2	..	37594i
23	1062	23.0	+33 13	9.0	9.0	A	4	..	37365i	73	1173	23.3	— 20 59	8.4	8.0	Fo	4	..	41088b
24	938	23.0	+ 4 23	8.7	9.0	Fo	2	..	37594i	74	2468	23.3	— 31 39	7.25	7.7	Go	8	..	14690b
25	1022	23.0	+ 1 29	9.0	9.0	Ao	3	..	12391b	75	2244	23.3	— 36 41	7.24	7.0	Ao	6	0,8	42844b
26	1085	23.0	+ 0 43	9.0	9.0	B9	3	..	37594i	76	2207	23.3	— 37 23	9.4	10.3	Ko	1	..	20707b
27	1136	23.0	— 4 14	10.4	11.0	G	1	..	4898m	77	506	23.3	— 58 16	8.5	8.1	Fo	5	..	20548b
28	1084	23.0	— 7 26	8.8	9.6	G5	2	..	4898m	78	365	23.3	— 68 9	9.2	9.3	A2	3	..	38367b
29	1128	23.0	— 8 24	8.2	8.3	A5	4	5,3	12770b	79	1217	23.4	+44 40	8.9	10.0	K2	1	..	38940i
30	1158	23.0	— 13 39	7.29	7.71	F5	6	..	18649b	80	1282	23.4	+43 8	9.5	9.5	A	1	..	38940i
31	1047	23.0	— 15 20	8.8	9.9	K2	3	..	39704b	81	1210	23.4	+37 16	8.7	9.1	F5	2	..	37365i
32	3099	23.0	— 24 45	10.3	10.3	Go	2	..	41088b	82	1161	23.4	+37 2	9.0	9.0	B8	2	..	37365i
33	2390	23.0	— 30 40	8.8	9.7	F2	4	..	14690b	83	912	23.4	+30 31	8.6	9.6	Ko	1	0,1	38921i
34	722	23.0	— 52 46	7.2	8.4	K2	5	E	20548b	84	909	23.4	+29 7	6.24	6.66	F5	6	..	36997i
35	415	23.0	— 60 3	8.5	8.5	Fo	5	..	38371b	85	862	23.4	+18 18	6.58	6.64	A2	..	2,6-	56,80
36	455	23.0	— 63 43	9.0	10.1	K2	3	..	38371b	86	788	23.4	+16 56	9.4	9.4	Ao	2	..	37602i
37	175	23.0	— 78 33	9.9	10.9	Ko	2	..	15162b	87	846	23.4	+ 9 22	8.1	8.6	F8	4	..	38167i
38	917	23.1	+53 16	8.2	8.2	Ao	4	0,3	37407i	88	1024	23.4	+ 1 31	9.7	9.8	A2	1	..	14663b
39	1279	23.1	+43 18	8.7	9.9	K5	1	..	38940i	89	1140	23.4	— 4 16	10.4	11.0	G	1	..	4898m
40	1064	23.1	+35 3	7.07	8.07	Ko	6	..	37365i	90	1141	23.4	— 14 52	8.91	9.33	F5	2	5,1	39704b
41	1065	23.1	+34 13	8.5	9.3	G5	4	..	37365i	91	1174	23.4	— 21 28	6.14	7.3	Ko	8	..	12370b
42	1063	23.1	+33 24	9.4	10.0	G	4	R	37365i	92	2446	23.4	— 25 13	9.3	9.8	Ko	3	..	41088b
43	839	23.1	+25 4	5.44	5.44	Ao	..	0,9-	56,80	93	2445	23.4	— 25 26	10.1	10.3	Ko	1	..	41088b
44	961	23.1	+20 21	7.35	8.35	Ko	3	..	37388i	94	2225	23.4	— 26 40	7.10	7.0	A2	6	0,5	42783b
45	786	23.1	+16 20	7.7	7.7	B9	6	0,6	37602i	95	2258	23.4	— 34 42	9.4	9.5	G5	1	..	14690b
46	1023	23.1	+ 1 18	8.7	9.3	Go	2	..	37594i	96	1847	23.4	— 43 28	8.5	8.2	F2	8	..	12756b
47	905	23.1	— 1 44	7.7	8.1	F5	4	..	37594i	97	1066	23.5	+34 37	9.0	9.3	F2	2	..	37365i
48	906	23.1	— 1 52	8.27	8.27	Ao	4	E	14663b	98	826	23.5	+26 52	8.4	8.4	Ao	3	..	37525i
49	832	23.1	— 54 25	7.2	7.9	F2	7	..	20548b	99	791	23.5	+10 24	9.4	9.4	Ao	3	..	39685b
50	176	23.1	— 78 54	9.8	10.6	G5	4	..	15162b	100	790	23.5	+10 3	7.77	7.77	Ao	6	..	38167i

THE HENRY DRAPER CATALOGUE.

36000

5^h 23^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	932	23.5	+ 5 56	8.3	8.4	A2	7	2,4	39685b	51	1985	23.8	-45 8	8.38	8.7	Go	4	..	12756b
2	1025	23.5	+ 1 8	7.59	7.65	A2	4	..	37594i	52	1183	23.9	+50 18	8.1	8.4	Fo	3	..	37366i
3	1110	23.5	- 3 33	8.6	9.6	Ko	5	5,1 R	4898m	53	1308	23.9	+42 51	8.4	9.0	Go	2	..	3894oi
4	1091	23.5	-20 53	8.2	9.3	Ko	3	..	41088b	54	922	23.9	+23 41	8.0	8.8	G5	3	..	37388i
5	1116	23.5	-22 29	9.2	9.5	B9	3	..	41088b	55	1028	23.9	+ 1 4	8.34	9.34	Ko	2	..	14663b
6	2450	23.5	-25 23	11.0	9.9	F5	2	..	41088b	56	1088	23.9	+ 0 15	9.2	9.2	Ao	3	..	12391b
7	2271	23.5	-27 21	8.2	8.7	F5	3	..	12663b	57	909	23.9	- 1 51	8.67	8.67	Ao	2	E	14663b
8	863	23.5	-53 35	7.7	8.3	F5	7	..	20548b	58	1115	23.9	- 3 24	6.17	6.15	B9	7	1,7	3759oi
9	469	23.5	-62 28	8.7	9.0	F2	4	..	38371b	59	1133	23.9	- 8 28	6.87	7.65	G5	7	0,3-	1277ob
10	972	23.6	+ 8 44	9.2	9.2	Ao	3	..	39685b	60	1884	23.9	-41 2	5.85	6.5	A2	..	1,7-	56,121
11	918	23.6	+ 3 7	9.0	9.0	Ao	2	..	37594i	61	458	23.9	-61 12	8.0	8.8	Ko	4	..	38371b
12	974	23.6	+ 2 5	7.7	7.6	B5	5	..	37594i	62	335	23.9	-71 36	8.5	8.6	A3	5	0,8	9062b
13	1026	23.6	+ 1 34	7.6	7.4	B3	6	..	37594i	63	..	23.9	-71 43	..	..	Oa	..	..	76,28
14	963	23.6	- 0 32	8.8	8.8	Ao	2	..	37594i	64	119	23.9	-82 29	9.4	9.8	F5	4	..	20557b
15	1111	23.6	- 3 19	9.2	10.3	K2	1	..	4898m	65	249	24.0	+74 15	6.99	7.27	Fo	5	0,5	37343i
16	1142	23.6	- 4 17	9.7	9.7	Ao	3	..	12391b	66	889	24.0	+57 10	6.46	7.02	Go	7	2,4	37407i
17	1141	23.6	- 4 47	7.42	7.50	A3	3	0,8	3755oi	67	1184	24.0	+50 57	7.60	8.60	Ko	3	..	37366i
18	1095	23.6	-18 5	7.58	8.14	Go	7	5,4	18522b	68	1326	24.0	+39 57	8.17	9.24	K2	2	2,1	37365i
19	2760	23.6	-23 11	10.1	10.4	K2	2	..	41088b	69	1187	24.0	+38 37	9.8	10.1	F	2	..	37365i
20	2759	23.6	-23 35	10.5	10.1	F2	2	..	41088b	70	1214	24.0	+37 45	8.6	8.7	A2	4	..	37365i
21	3104	23.6	-24 55	10.1	10.4	Go	1	..	41088b	71	991	24.0	+31 13	7.8	7.8	Ao	4	..	36997i
22	2476	23.6	-31 50	9.1	8.5	Ao	4	..	1469ob	72	864	24.0	+18 22	7.6	7.9	F	7	R	19792i
23	465	23.6	-65 16	9.2	9.8	Go	2	..	38371b	73	863	24.0	+18 21	7.6	7.6	Ao	7	..	19792i
24	400	23.7	+66 18	8.9	8.9	Ao	2	..	38112i	74	965	24.0	- 0 44	10.4	11.8	Ma	..	..	M
25	478	23.7	+65 56	8.9	9.9	Ko	1	..	38112i	75	1262	24.0	- 2 14	9.1	9.1	B9	4	..	12391b
26	793	23.7	+61 11	8.7	8.8	A2	3	..	38907i	76	1148	24.0	-16 56	8.4	8.5	A2	4	..	18649b
27	1321	23.7	+39 45	7.77	8.77	Ko	4	..	37391i	77	1185	24.0	-19 37	9.2	9.5	Go	3	..	41088b
28	913	23.7	+30 23	8.8	8.8	Ao	2	2,1	37525i	78	1097	24.0	-19 59	8.93	9.8	Ko	3	..	41088b
29	933	23.7	+ 5 46	9.0	9.6	Go	2	..	39685b	79	1096	24.0	-20 50	2.96	3.52	Go	..	R	28,197
30	920	23.7	+ 3 34	8.7	8.7	Ao	4	..	39685b	80	2231	24.0	-26 15	9.4	8.9	Fo	5	..	41088b
31	1027	23.7	+ 1 25	9.4	9.4	Ao	3	..	14663b	81	2265	24.0	-29 41	8.2	8.8	F2	4	..	1469ob
32	1260	23.7	- 2 48	9.2	9.2	B8	4	..	12391b	82	1080	24.1	+51 9	7.88	8.66	G5	4	..	37366i
33	1113	23.7	- 3 8	9.9	9.9	A	2	E	4898m	83	1278	24.1	+48 52	7.30	7.25	B8	4	..	37366i
34	1112	23.7	- 3 57	9.1	9.7	Go	3	5,2-	4898m	84	1221	24.1	+44 21	9.5	9.8	Fo	1	..	3894oi
35	1265	23.7	- 5 26	7.98	8.40	F5	7	3,2	4898m	85	992	24.1	+31 27	7.76	8.94	K5	2	..	37525i
36	1094	23.7	-20 57	9.5	9.5	G5	2	..	41088b	86	910	24.1	+13 31	8.5	8.6	A5	2	..	37567i
37	2452	23.7	-25 44	7.43	7.3	A2	5	..	18557b	87	1029	24.1	+ 1 5	8.94	8.94	Ao	3	..	14663b
38	2260	23.7	-34 42	6.93	7.9	G5	7	..	1469ob	88	1089	24.1	+ 0 7	8.23	8.73	F8	2	..	12391b
39	864	23.7	-53 41	8.0	8.3	A2	8	..	20548b	89	1263	24.1	- 2 52	8.6	8.6	Ao	5	..	12391b
40	1206	23.8	+41 23	6.09	7.09	Ko	5	0,8	37391i	90	1146	24.1	- 4 46	var.	var.	Md	..	R	M
41	1322	23.8	+39 46	6.52	7.52	Ko	7	..	38124i	91	1176	24.1	-21 14	9.0	8.6	Fo	4	..	41088b
42	1069	23.8	+34 8	7.8	8.6	G5	4	..	37365i	92	2457	24.1	-25 51	10.8	10.1	A	2	..	41088b
43	989	23.8	+31 44	7.7	7.7	Ao	3	..	38921i	93	2480	24.1	-31 6	9.3	9.6	K5	3	..	1469ob
44	911	23.8	+29 29	7.16	7.94	G5	4	..	36997i	94	2359	24.1	-32 30	6.88	8.0	G5	8	..	1469ob
45	908	23.8	+13 21	7.9	8.3	F5	3	..	37567i	95	2066	24.1	-44 57	6.89	8.4	K2	7	..	12756b
46	964	23.8	- 0 41	8.8	8.8	B9	4	..	37594i	96	849	24.1	-56 42	8.3	8.9	Ko	5	..	20548b
47	1191	23.8	- 6 31	9.2	10.0	G5	1	..	4898m	97	919	24.2	+53 38	9.4	9.4	Ao	2	..	37366i
48	1088	23.8	- 7 48	8.7	9.8	K2	2	2,1-	4898m	98	1129	24.2	+45 25	9.0	9.0	Ao	1	..	3894oi
49	1184	23.8	-11 9	9.2	9.2	Ao	1	..	10366b	99	1189	24.2	+38 50	8.8	9.2	F5	4	..	37365i
50	1095	23.8	-20 29	9.0	10.4	K5	1	..	41088b	100	1190	24.2	+38 29	9.0	9.0	A	2	..	37365i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

36100

5^h 24^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	922	24.2	+22 29	8.4	9.8	Mb	2	..	37388i	51	1092	24.6	- 7 21	6.55	6.43	B5	5	0,10	3755oi
2	865	24.2	+21 18	8.8	9.3	F8	2	..	37388i	52	1147	24.6	-17 31	8.0	8.6	Go	4	..	18522b
3	792	24.2	+16 6	7.38	8.73	Ma	5	0,4	37602i	53	3119	24.6	-24 21	7.8	8.3	A2	4	..	18557b
4	803	24.2	+12 12	7.00	6.95	B8	8	..	37567i	54	1985	24.6	-39 0	7.52	8.3	G5	5	..	14691b
5	925	24.2	+ 3 38	10.0	10.1	A2	2	2,1	39685b	55	509	24.6	-58 39	7.5	7.1	Ao	8	..	20548b
6	1268	24.2	- 5 32	8.0	9.1	K2	5	0,3-	4898m	56	..	24.6	-71 26	..	..	Oa	..	..	76,28
7	1192	24.2	- 6 44	8.6	9.8	K5	1	..	4898m	57	1168	24.7	+47 8	7.74	7.72	B9	4	..	37391i
8	1122	24.2	-22 31	6.82	7.5	Go	10	..	41088b	58	1290	24.7	+43 23	9.2	9.2	B9	3	..	3894oi
9	2232	24.2	-26 49	8.4	9.2	Ko	3	..	41088b	59	1071	24.7	+33 13	8.7	9.7	Ko	2	..	37525i
10	2251	24.2	-36 5	9.4	9.2	F5	2	..	20707b	60	925	24.7	+22 23	6.49	7.49	Ko	6	..	37388i
11	917	24.3	+30 58	8.7	9.2	F8	2	2,2	37525i	61	793	24.7	+16 44	9.4	9.4	A	2	..	37602i
12	843	24.3	+25 16	8.1	8.2	A3	3	1,2-	37388i	62	837	24.7	+15 17	5.78	5.84	A2	..	0, R	56,80
13	969	24.3	+20 29	6.85	6.73	B5	6	3,7	37388i	63	941	24.7	+ 6 52	8.2	8.3	A2	5	..	39685b
14	938	24.3	+ 6 45	8.2	8.8	Go	3	..	39685b	64	932	24.7	+ 3 29	9.0	9.0	Ao	4	..	39685b
15	934	24.3	+ 5 8	8.01	7.96	B8	4	..	37594i	65	1033	24.7	+ 2 2	9.2	9.2	B9	4	..	37594i
16	975	24.3	+ 2 47	9.4	9.4	Ao	3	..	14663b	66	1032	24.7	+ 1 42	5.67	5.50	B3	9	..	37594i
17	968	24.3	- 0 8	7.84	7.84	Ao	4	..	37594i	67	913	24.7	- 1 11	4.97	6.15	K5	..	0,6-	56,80
18	1266	24.3	- 2 5	8.6	8.6	Ao	3	..	12391b	68	1148	24.7	-17 24	8.1	9.2	K2	3	..	18522b
19	1147	24.3	- 4 54	9.5	10.3	G5	2	..	4898m	69	1190	24.7	-19 14	8.2	8.6	Ko	4	..	18522b
20	1269	24.3	- 5 52	8.0	8.0	B9	7	0,3	4898m	70	2272	24.7	-29 26	9.1	9.3	G5	3	..	1469ob
21	1089	24.3	- 7 52	8.6	8.7	A5	3	..	10366b	71	2368	24.7	-32 7	8.7	10.2	Ko	1	..	1469ob
22	1098	24.3	-20 46	9.9	10.7	Ko	2	..	41088b	72	1169	24.8	+47 17	9.2	9.2	B9	4	..	37366i
23	1177	24.3	-21 47	9.2	10.1	Go	2	..	41088b	73	1312	24.8	+42 26	8.0	8.0	B9	4	..	3894oi
24	1123	24.3	-22 58	9.5	9.5	A5	2	..	41088b	74	829	24.8	+26 30	8.6	9.0	F5	2	..	37525i
25	2409	24.3	-30 13	9.1	9.3	Fo	2	..	1469ob	75	978	24.8	+ 2 17	10.4	10.4	Ao	3	0,3	39685b
26	2483	24.3	-31 44	9.6	9.4	F5	2	..	1469ob	76	914	24.8	- 1 44	9.0	9.0	Ao	4	..	12391b
27	417	24.3	-60 43	9.2	9.6	G5	3	..	38371b	77	1125	24.8	-22 42	10.1	10.4	F8	2	..	41088b
28	442	24.3	-64 28	9.32	9.7	Go	3	..	38371b	78	2492	24.8	-31 11	8.8	8.7	F2	5	..	1469ob
29	66	24.3	-85 36	8.7	9.3	Go	3	..	15145b	79	136	24.8	-81 10	10.2	10.8	Go	2	..	20557b
30	250	24.4	+74 38	7.47	8.03	Go	4	5,3	37343i	80	1022	24.9	+46 5	9.2	9.3	A2	2	..	3894oi
31	590	24.4	+63 54	9.5	10.5	Ko	2	..	38154i	81	1076	24.9	+34 57	8.57	8.85	Fo	4	..	37365i
32	930	24.4	+ 3 50	8.8	9.8	Ko	3	0,1	39685b	82	933	24.9	+ 3 28	9.4	9.4	Ao	3	..	39685b
33	928	24.4	+ 3 3	7.5	7.3	B3	..	0,7-	56,80	83	1036	24.9	+ 1 10	9.7	9.7	Ao	2	..	14663b
34	1116	24.4	- 3 32	6.06	7.06	Ko	5	..	3755oi	84	1092	24.9	+ 1 1	10.4	10.4	Ao	1	..	14663b
35	2410	24.4	-30 7	8.89	9.0	F5	2	..	1469ob	85	1268	24.9	- 2 20	9.2	9.2	Ao	3	..	12391b
36	1984	24.4	-39 19	6.78	7.7	G5	8	..	14691b	86	3125	24.9	-24 30	9.0	9.8	Ko	2	..	41088b
37	1860	24.4	-46 11	7.8	8.4	F2	7	..	12756b	87	2220	24.9	-37 19	5.53	5.53	Ao	8	..	42844b
38	852	24.4	-56 44	9.5	9.5	Ao	3	..	20548b	88	1865	24.9	-43 18	9.5	9.6	Fo	3	..	12756b
39	969	24.5	- 0 6	6.93	6.93	Ao	7	..	37594i	89	472	24.9	-59 0	5.06	6.1	G5	..	R	56,121
40	2236	24.5	-26 35	9.3	9.8	Ko	2	..	41088b	90	471	24.9	-59 17	8.6	8.5	F2	4	..	20548b
41	2486	24.5	-31 55	8.0	8.7	G5	4	..	1469ob	91	472	24.9	-62 52	8.7	9.5	G5	5	..	38371b
42	2363	24.5	-32 54	7.8	8.1	Ao	6	2,5	1469ob	92	318	24.9	-76 1	7.9	8.0	A5	8	..	15162b
43	2265	24.5	-34 11	10.0	9.7	Ao	2	..	1469ob	93	533	25.0	+65 0	8.55	8.55	Ao	4	..	38952i
44	834	24.5	-54 5	8.5	9.0	F8	4	..	20548b	94	534	25.0	+64 58	7.50	7.56	A2	5	0,7	36654i
45	372	24.5	-72 26	8.2	8.3	A3	6	1,9	9062b	95	967	25.0	+52 4	8.2	9.2	Ko	2	..	37366i
46	1364	24.6	+49 19	6.68	7.10	F5	6	..	37366i	96	1081	25.0	+51 18	9.2	9.2	A	2	..	37366i
47	1223	24.6	+44 23	9.4	9.4	B8	2	..	3894oi	97	1151	25.0	+35 25	8.0	8.0	Ao	4	..	38124i
48	1193	24.6	+38 15	7.6	8.8	K5	4	..	37365i	98	978	25.0	+ 8 14	9.0	9.1	A2	2	..	39685b
49	1167	24.6	+36 43	7.8	8.8	Ko	4	..	37365i	99	942	25.0	+ 6 25	9.0	9.8	G5	3	..	39685b
50	970	24.6	- 0 54	7.9	8.0	A2	5	0,8	3755oi	100	948	25.0	+ 4 48	9.50	9.50	Ao	3	..	39685b

THE HENRY DRAPER CATALOGUE.

36200

5^h 25^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	935	25.0	+ 3 40	9.4	9.4	Ao	2	..	39685b	51	1271	25.3	- 2 23	9.2	9.8	Go	2	..	12391b
2	1273	25.0	- 5 1	9.35	9.85	F8	2	..	4898m	52	1117	25.3	- 3 23	8.4	8.7	F2	7	2,2	4898m
3	1096	25.0	- 7 44	9.2	9.2	Ao	3	..	4898m	53	1164	25.3	-13 32	8.6	9.1	F8	2	..	18649b
4	1101	25.0	-20 38	9.5	11.0	Ko	1	..	41088b	54	1152	25.3	-17 21	9.0	9.4	F5	1	..	18522b
5	2258	25.0	-36 43	9.4	10.0	G	1	..	20707b	55	2421	25.3	-30 12	6.62	8.1	Ko	7	..	14690b
6	2071	25.0	-44 33	9.0	10.8	K5	1	..	20648b	56	462	25.3	-61 47	9.2	9.9	Go	2	..	38371b
7	367	25.0	-67 59	8.8	9.8	Ko	2	..	38367b	57	412	25.3	-66 11	9.1	9.1	Ao	3	..	38371b
8	296	25.0	-73 54	7.3	8.3	Ko	8	..	15162b	58	182	25.4	+79 17	8.8	9.6	G5	3	..	37558i
9	228	25.1	+75 8	8.72	9.00	Fo	2	..	37343i	59	1293	25.4	+43 38	8.6	8.6	Ao	3	..	38940i
10	360	25.1	+71 0	8.5	8.5	Ao	4	..	38112i	60	1219	25.4	+38 0	8.0	8.8	G5	4	..	37365i
11	1168	25.1	+36 41	9.1	9.2	A2	2	..	37365i	61	1156	25.4	+35 55	8.6	9.2	Go	4	..	37365i
12	1077	25.1	+34 48	8.0	7.9	B5	4	..	38124i	62	834	25.4	+12 1	7.3	7.1	B3	8	..	37602i
13	1016	25.1	+32 23	9.4	10.0	Go	2	..	37525i	63	800	25.4	+10 10	7.27	7.25	B9	7	E	38167i
14	998	25.1	+31 26	8.4	9.4	Ko	2	0,1	37525i	64	801	25.4	+10 5	7.14	7.14	Ao	8	E	38167i
15	783	25.1	+27 41	7.50	8.00	F8	4	..	36997i	65	912	25.4	+ 7 28	9.0	9.1	A3	3	..	39685b
16	938	25.1	+17 17	9.4	9.4	Ao	2	..	37602i	66	945	25.4	+ 6 42	8.5	8.6	A5	3	..	37594i
17	949	25.1	+ 4 7	6.37	7.37	Ko	5	0,5	37594i	67	939	25.4	+ 5 52	4.32	4.15	B3	..	R	56,80
18	936	25.1	+ 3 11	9.2	9.3	A5	2	..	37594i	68	940	25.4	+ 3 27	9.0	9.8	G5	1	..	37594i
19	918	25.1	- 1 50	7.87	7.85	B9	4	E	37594i	69	1098	25.4	+ 0 17	7.8	7.9	A5	6	..	37594i
20	1202	25.1	-10 1	8.56	9.56	Ko	1	..	10366b	70	1118	25.4	- 3 42	9.9	10.5	G	1	R	4898m
21	1126	25.1	-22 4	9.1	10.7	K2	2	..	41088b	71	1200	25.4	- 6 4	8.0	8.8	G5	6	..	4898m
22	2241	25.1	-26 27	9.3	9.8	G5	2	..	41088b	72	1195	25.4	-11 31	8.4	9.0	Go	2	5,1	18414b
23	1990	25.1	-39 27	10.2	10.0	Ko	2	..	14691b	73	1154	25.4	-16 45	9.1	9.6	F8	2	..	18522b
24	1905	25.1	-40 46	8.4	8.6	F5	4	..	14691b	74	1129	25.4	-22 48	7.72	8.6	G5	6	..	41088b
25	510	25.1	-58 19	9.1	8.7	Fo	3	..	20548b	75	1818	25.4	-48 47	8.3	8.8	Ko	4	..	12756b
26	106	25.1	-83 16	8.9	9.5	Go	6	..	20557b	76	468	25.4	-65 5	10.1	10.1	Ao	2	..	38371b
27	1081a	25.2	+51 29	9.4	9.4	Ao	2	..	37366i	77	369	25.4	-68 5	8.1	8.7	Go	4	..	38367b
28	1188	25.2	+50 29	8.6	9.6	Ko	3	..	37366i	78	968	25.5	+52 34	7.9	7.9	Ao	4	2,4	37407i
29	1317	25.2	+42 20	7.88	8.16	Fo	2	..	37391i	79	1171	25.5	+47 30	9.5	9.5	Ao	2	..	37366i
30	974	25.2	+20 6	8.75	9.93	K5	2	..	37388i	80	1079	25.5	+34 52	9.4	9.2	B	1	..	38124i
31	867	25.2	+18 28	9.0	10.4	Mb	2	5,1	37388i	81	921	25.5	+29 22	8.6	9.4	G5	2	0,1	37525i
32	808	25.2	+12 16	8.5	8.8	F2	3	..	38223i	82	813	25.5	+28 56	8.7	9.0	Fo	2	0,1	37525i
33	911	25.2	+ 7 23	8.3	9.3	Ko	3	..	39685b	83	838	25.5	+15 43	8.5	9.0	F8	2	..	37602i
34	1274	25.2	- 5 17	8.6	8.6	Ao	6	..	4898m	84	856	25.5	+ 9 10	9.7	9.7	B9	4	..	39685b
35	1197	25.2	- 6 0	9.2	9.8	G	2	..	4898m	85	1099	25.5	- 7 31	6.24	6.07	B3	..	0,6-	56,80
36	1152	25.2	-16 0	8.6	8.6	Ao	5	..	18522b	86	1142	25.5	- 8 43	9.2	9.5	Fo	1	..	10366b
37	1179	25.2	-21 8	7.6	7.6	A2	7	0,5	41088b	87	3138	25.5	-24 9	9.6	10.6	K5	1	R	41088b
38	2782	25.2	-23 42	10.8	10.4	Go	1	..	41088b	88	309	25.5	-75 6	8.78	8.4	Ao	4	..	15162b
39	2470	25.2	-25 23	9.0	9.2	Ko	5	..	41088b	89	203	25.6	+76 43	7.8	8.1	F2	4	0,4	37558i
40	2263	25.2	-36 58	8.2	9.1	Ma	4	..	20707b	90	393	25.6	+69 2	8.4	8.8	F5	5	..	38112i
41	389	25.2	-70 7	10.02	10.1	Mb	..	..	M	91	1323	25.6	+42 53	8.4	8.4	B9	3	..	38940i
42	1083	25.3	+51 22	8.2	8.2	B9	5	..	37366i	92	1158	25.6	+35 33	8.2	8.6	F5	4	..	37365i
43	1131	25.3	+45 28	7.82	8.32	F8	3	..	37391i	93	1080	25.6	+34 21	8.2	9.2	Ko	2	..	38124i
44	1132	25.3	+45 25	7.92	8.70	G5	2	..	38940i	94	..	25.6	+30 22	Nov.	Nov.	Pec.	..	R	76,35
45	1227	25.3	+44 18	7.6	7.6	B8	4	..	37391i	95	1202	25.6	- 6 18	9.2	10.2	Ko	1	..	4898m
46	928	25.3	+22 7	9.8	10.1	Fo	2	..	37388i	96	2500	25.6	-31 2	8.1	9.3	Ma	3	..	14690b
47	869	25.3	+18 10	8.8	9.2	F5	2	..	37388i	97	2276	25.6	-34 52	8.60	9.1	Ko	3	..	14690b
48	982	25.3	+ 8 18	7.7	8.2	F8	3	..	38223i	98	2057	25.6	-38 52	9.4	9.4	A2	2	E	14691b
49	943	25.3	+ 6 14	9.0	9.0	Ao	3	..	39685b	99	1909	25.6	-40 6	9.05	8.8	Go	4	..	14691b
50	939	25.3	+ 3 39	8.8	8.8	Ao	3	R	39685b	100	1733	25.6	-49 15	8.1	8.7	F2	6	..	12756b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

5300

5^h 25^m.6

.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	..	m. 25.6	° -68 33	Neb.	Neb.	Pc	..	R	76,22	51	948	m. 26.0	° + 3 13	5.52	5.35	B3	..	O, R	56,80
2	204	25.7	+76 18	8.4	9.2	G5	2	0,2	37343i	52	1275	26.0	- 2 47	9.2	9.2	B9	3	..	12391b
3	480	25.7	+65 34	8.9	8.9	Ao	2	..	38112i	53	1120	26.0	- 3 24	9.0	9.8	G5	4	..	4898m
4	1023	25.7	+46 48	7.54	7.54	Ao	3	0,3	37391i	54	1103	26.0	-18 41	8.8	10.0	K5	1	..	18522b
5	1222	25.7	+37 58	8.0	8.1	A3	6	..	37365i	55	458	26.0	-63 47	9.3	9.8	F8	3	..	38371b
6	1221	25.7	+37 15	8.5	9.3	G5	1	..	38124i	56	413	26.0	-66 32	8.7	9.1	F5	2	..	38371b
7	834	25.7	+26 36	7.7	8.8	K2	3	..	37525i	57	313	26.1	+71 36	6.82	7.60	G5	7	..	37343i
8	810	25.7	+12 29	8.3	9.1	G5	2	..	37602i	58	1283	26.1	+48 14	7.70	8.48	G5	4	..	38940i
9	942	25.7	+ 5 2	10.0	10.3	F2	2	..	39685b	59	1173	26.1	+36 44	8.7	9.9	K5	..	..	M
10	953	25.7	+ 4 35	8.3	8.3	B8	4	..	37594i	60	1174	26.1	+36 15	7.08	7.22	A5	8	..	37365i
11	1039	25.7	+ 1 32	9.0	9.0	Ao	2	..	37594i	61	984	26.1	+ 2 32	10.4	10.4	Ao	2	..	39685b
12	978	25.7	- 0 3	8.08	8.03	B8	5	..	37594i	62	1121	26.1	- 3 16	9.2	10.0	G5	3	..	4898m
13	977	25.7	- 0 27	8.7	8.7	B9	4	..	37594i	63	1154	26.1	- 4 1	9.7	10.3	Go	2	..	4898m
14	1131	25.7	-22 17	9.1	10.4	G5	2	..	41088b	64	1153	26.1	- 4 41	9.5	10.3	G5	1	..	4898m
15	457	25.7	-63 16	8.9	9.7	G5	4	..	38371b	65	1155	26.1	- 4 54	8.62	9.69	K2	3	2,2	4898m
16	469	25.7	-65 50	8.1	9.2	K2	4	..	38371b	66	1204	26.1	- 6 17	8.0	8.0	B9	7	..	4898m
17	891	25.8	+57 47	8.1	8.1	Ao	5	..	37407i	67	2800	26.1	-23 36	9.8	9.3	A5	3	..	41088b
18	1133	25.8	+45 39	8.4	8.4	Ao	3	..	38940i	68	423	26.1	-60 57	9.0	9.9	K5	2	..	38371b
19	1330	25.8	+39 29	8.2	9.0	G5	1	..	38124i	69	446	26.1	-64 25	7.54	7.2	Ao	8	..	38371b
20	873	25.8	+18 10	6.98	8.16	K5	3	0,3-	37388i	70	890	26.2	+59 26	8.4	8.4	Ao	6	2,4	37407i
21	943	25.8	+17 14	8.3	8.4	A5	2	3,2	37602i	71	1024	26.2	+32 7	4.88	4.66	B1	..	R	4683c
22	840	25.8	+15 14	9.0	9.4	F5	2	..	37602i	72	1001	26.2	+31 57	7.6	8.7	K2	3	0,3	37525i
23	933	25.8	+14 33	8.1	8.4	Fo	5	5,4	37602i	73	924	26.2	+29 20	8.7	9.5	G5	1	..	38921i
24	1277	25.8	- 5 35	8.6	8.6	Ao	4	..	4898m	74	835	26.2	+26 54	7.11	6.99	B5	5	3,5	36997i
25	1166	25.8	-13 2	8.4	9.2	G5	2	..	18649b	75	945	26.2	+17 28	7.9	7.9	Ao	5	0,4	37602i
26	1167	25.8	-13 35	8.6	8.6	Ao	4	..	18522b	76	860	26.2	+ 9 9	7.68	7.63	B8	5	..	38223i
27	1102	25.8	-18 38	8.6	9.2	Go	2	..	18522b	77	957	26.2	+ 4 14	8.3	8.6	F2	4	..	37594i
28	2250	25.8	-26 16	11.3	9.8	A	1	R	41088b	78	983	26.2	+ 3 0	9.0	9.3	F2	4	..	37594i
29	2279	25.8	-34 36	9.0	8.8	G5	3	..	14690b	79	1204	26.2	-10 9	7.01	7.57	Go	6	2,7	10366b
30	1898	25.8	-41 17	9.1	9.4	Go	2	..	14691b	80	1959	26.2	-42 9	8.9	10.3	Ko	2	..	14691b
31	1999	25.8	-45 53	9.3	9.7	Go	2	..	12756b	81	876	26.2	-53 58	8.0	7.9	Ao	8	..	20548b
32	1035	25.9	+56 11	8.0	8.0	B9	6	1,5	37407i	82	473	26.2	-62 34	8.8	9.3	F8	3	..	38371b
33	1134	25.9	+45 9	8.42	9.42	Ko	1	..	38940i	83	201	26.3	+77 29	8.4	8.4	Ao	6	0,4	37558i
34	1294	25.9	+43 42	8.9	9.0	A2	3	..	38940i	84	252	26.3	+74 59	6.36	7.54	K5	6	0,6	37343i
35	923	25.9	+29 7	7.8	8.2	F5	4	0,3	37525i	85	998	26.3	+55 18	9.9	9.9	A	1	..	37366i
36	946	25.9	+19 27	8.1	8.1	Ao	2	..	37388i	86	969	26.3	+52 9	8.4	8.7	F2	3	3,2	37366i
37	934	25.9	+14 51	6.62	6.50	B5	8	0,9	37567i	87	1335	26.3	+39 26	7.8	8.4	Go	4	..	38124i
38	944	25.9	+ 5 35	9.4	9.8	F5	2	..	37594i	88	936	26.3	+22 52	9.5	9.5	A	2	..	37388i
39	945	25.9	+ 3 33	9.2	10.0	G5	2	..	39685i	89	875	26.3	+18 32	4.73	6.08	Ma	..	0,7-	56,80
40	944	25.9	+ 3 16	9.0	8.8	B3	5	..	37594i	90	986	26.3	+ 8 24	8.5	9.6	K2	2	..	39685b
41	1274	25.9	- 2 26	9.0	9.0	B9	6	..	12391b	91	958	26.3	+ 4 27	8.3	8.9	Go	3	..	37594i
42	1152	25.9	- 4 20	8.0	8.1	A2	8	2,3	4898m	92	1045	26.3	+ 1 37	7.9	7.8	B5	6	..	37594i
43	1168	25.9	-13 40	8.6	9.6	Ko	1	..	18522b	93	1278	26.3	- 2 3	8.6	8.6	B8	5	..	12391b
44	2254	25.9	-26 15	9.1	9.5	Ko	3	..	41088b	94	1279	26.3	- 2 10	8.6	8.6	Ao	6	..	12391b
45	2253	25.9	-26 22	9.3	9.5	G5	3	..	41088b	95	1123	26.3	- 3 41	8.8	9.9	K2	3	3,2 R	4898m
46	2269	25.9	-36 39	8.7	9.4	G	2	..	20707b	96	1063	26.3	-15 53	8.6	8.9	Fo	4	..	18522b
47	432	25.9	-67 51	9.0	9.8	G5	2	..	38367b	97	1134	26.3	-22 45	9.9	10.4	F8	2	..	41088b
48	1191	26.0	+50 2	9.22	9.22	Ao	2	..	37366i	98	2219	26.3	-28 31	8.1	9.5	K5	1	..	12663b
49	977	26.0	+20 41	8.8	8.9	A2	3	..	37388i	99	2381	26.3	-32 33	8.0	8.8	A5	4	0,3-	14690b
50	915	26.0	+ 7 28	8.1	9.1	Ko	4	0,2	39685b	100	1918	26.3	-40 33	8.4	9.1	G5	3	..	14691b

THE HENRY DRAPER CATALOGUE.

36400

5^h 26^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	447	26.3	-64 41	8.6	9.1	F8	5	..	38371b	51	1087	26.7	+51 51	8.0	8.0	Ao	3	..	37366i
2	433	26.3	-67 35	..	10.4	Oa	..	..	76,28	52	1226	26.7	+37 28	9.4	9.5	A2	2	..	37365i
3	911	26.4	+54 39	8.9	8.9	Ao	2	..	37366i	53	1027	26.7	+32 13	6.54	6.52	B9	6	..	36997i
4	1218	26.4	+42 2	6.30	6.25	B8	6	..	37391i	54	990	26.7	+ 8 34	8.3	8.3	B9	4	..	38223i
5	1025	26.4	+32 35	8.5	8.5	Ao	3	..	37525i	55	1050	26.7	+ 2 1	9.7	9.7	Ao	2	..	39685b
6	951	26.4	+19 3	7.7	8.1	F5	5	0,4	37602i	56	929	26.7	- 1 57	8.22	9.22	Ko	2	..	12391b
7	946	26.4	+17 40	8.2	8.5	Fo	4	5,3	37602i	57	1126	26.7	- 3 18	6.77	7.55	G5	3	5,7	37550i
8	794	26.4	+16 59	5.49	5.47	B9	..	0,8-	56,80	58	1184	26.7	-21 12	9.1	9.3	Go	3	..	41088b
9	919	26.4	+ 7 57	10.0	10.0	Ao	2	..	39685b	59	1183	26.7	-21 40	8.6	9.8	K2	3	..	41088b
10	948	26.4	+ 5 14	7.7	8.5	G5	6	0,4	37594i	60	2808	26.7	-23 35	9.4	9.3	B9	5	..	41088b
11	1156	26.4	- 4 1	9.7	9.7	Ao	2	..	4898m	61	2487	26.7	-25 3	9.65	9.6	G5	3	..	41088b
12	1281	26.4	- 5 47	9.2	9.7	F8	1	..	4898m	62	2225	26.7	-28 52	8.4	9.2	Ko	1	..	12398b
13	1106	26.4	-18 41	8.6	9.7	K2	4	..	18522b	63	2239	26.7	-37 30	9.4	10.3	Ko	1	..	42101b
14	1135	26.4	-22 54	9.0	9.9	K2	3	..	41088b	64	2007	26.7	-39 52	9.3	9.8	G5	2	..	42101b
15	1920	26.4	-40 49	8.2	8.8	Ko	4	..	14691b	65	971	26.8	+52 53	8.1	9.1	Ko	3	0,2	37366i
16	2087	26.4	-44 22	9.5	9.9	A3	3	..	20648b	66	1367	26.8	+49 42	9.4	9.7	F	1	..	37366i
17	1801	26.4	-50 48	7.4	9.1	K2	5	..	12756b	67	1137	26.8	+45 11	8.47	8.45	B9	2	..	37391i
18	448	26.4	-64 7	10.2	10.8	G	1	..	38371b	68	1301	26.8	+43 52	7.18	7.16	B9	5	..	37391i
19	68	26.4	-85 9	9.2	9.3	A2	3	..	15145b	69	852	26.8	+25 50	8.0	9.0	Ko	3	5,2	37525i
20	592	26.5	+63 25	8.0	8.1	A3	3	..	36654i	70	991	26.8	+ 8 48	8.3	8.9	Go	3	..	39685b
21	891	26.5	+59 41	8.21	8.21	Ao	5	2,3	37407i	71	951	26.8	+ 5 58	9.0	9.0	B9	4	..	39685b
22	1232	26.5	+44 43	7.82	8.24	F5	3	..	37391i	72	952	26.8	+ 3 4	9.4	9.4	Ao	2	..	37594i
23	1204	26.5	+38 42	8.0	8.0	Ao	3	..	38124i	73	1105	26.8	-20 56	5.50	5.50	Ao	..	0,9	28,197
24	1081	26.5	+33 22	8.4	9.2	G5	2	..	37365i	74	3156	26.8	-24 21	9.1	9.3	F5	2	..	18557b
25	1003	26.5	+31 48	7.26	7.32	A2	5	..	36997i	75	2368	26.8	-33 37	8.7	9.3	K2	2	..	14690b
26	936	26.5	+23 19	9.1	9.2	A2	2	..	37388i	76	1882	26.8	-43 35	8.3	8.4	Fo	7	..	12756b
27	839	26.5	+11 9	8.5	8.5	Ao	4	0,3	37602i	77	1880	26.8	-43 51	8.6	9.0	F5	6	..	12756b
28	922	26.5	+ 7 39	9.7	9.8	A2	1	..	39685b	78	425	26.8	-60 46	8.1	8.5	K2	4	..	38371b
29	986	26.5	+ 2 46	7.8	7.9	A2	4	..	14071i	79	436	26.8	-67 54	9.0	9.5	F8	2	..	38367i
30	1207	26.5	- 6 47	6.03	5.86	B3	6	0,9	37550i	80	319	26.8	-76 42	8.5	9.3	G5	7	..	15162b
31	1198	26.5	-19 30	9.0	9.3	F2	4	..	18522b	81	141	26.8	-81 4	8.8	9.4	Go	6	..	20557b
32	1181	26.5	-21 29	8.0	9.8	K2	4	..	41088b	82	253	26.9	+74 33	9.0	9.0	Ao	1	..	37343i
33	2804	26.5	-23 9	9.6	9.3	Go	4	..	41088b	83	1177	26.9	+36 24	7.7	7.5	Br	3	..	38124i
34	1510	26.5	-51 39	9.1	9.6	Ko	1	..	24143b	84	1028	26.9	+32 44	6.50	6.50	Ao	6	..	36997i
35	424	26.5	-60 30	7.04	7.7	Go	7	..	38371b	85	982	26.9	- 0 22	6.87	6.63	Bo	..	R	28,197
36	373	26.5	-69 41	8.7	9.3	Go	4	..	20540b	86	983	26.9	- 0 22	2.48	2.24	Bo	..	R	28,197
37	481	26.6	+65 42	9.7	10.3	Go	1	..	38952i	87	1103	26.9	- 7 8	7.49	7.44	B8	7	0,5	4898m
38	1025	26.6	+46 7	8.8	9.9	K2	2	..	38940i	88	1185	26.9	-21 26	9.0	9.3	Ko	3	..	41088b
39	1233	26.6	+44 10	9.2	9.2	Ao	3	..	38940i	89	2265	26.9	-26 16	9.6	10.1	Ko	2	..	41088b
40	818	26.6	+28 16	8.6	8.9	F2	2	3,2-	38921i	90	2066	26.9	-38 50	10.4	10.1	A2	1	..	42101b
41	841	26.6	+26 40	8.2	8.0	B2	4	R	37525i	91	516	26.9	-58 20	8.3	9.1	K5	3	..	20548b
42	840	26.6	+11 9	8.7	8.7	Ao	2	..	38223i	92	517	26.9	-58 27	8.7	9.4	K5	2	..	20548b
43	981	26.6	+ 0 2	8.38	9.16	G5	2	..	12391b	93	475	26.9	-59 14	8.7	9.6	Ma	2	..	20548b
44	928	26.6	- 1 12	9.0	9.0	B9	2	..	12391b	94	475	26.9	-62 34	9.3	9.9	Go	1	..	38371b
45	1282	26.6	- 5 8	9.2	10.0	G5	1	..	4898m	95	229	27.0	+75 16	8.47	9.65	K5	1	..	37343i
46	2806	26.6	-23 47	9.4	9.2	A2	4	..	41088b	96	401	27.0	+66 38	6.24	6.38	A5	8	..	36654i
47	2088	26.6	-44 52	7.4	9.1	Ma	3	..	12756b	97	1368	27.0	+49 11	8.56	8.62	A2	3	..	37366i
48	731	26.6	-52 2	8.6	9.3	K5	3	..	24143b	98	1333	27.0	+42 19	9.2	9.2	Ao	2	..	38940i
49	823	26.6	-57 45	8.8	9.5	A5	3	..	20548b	99	1083	27.0	+34 39	6.05	6.11	A2	8	0,8	37365i
50	395	26.7	+68 9	9.5	9.6	A5	2	..	38112i	100	850	27.0	+24 18	8.5	9.0	F8	2	..	37388i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

36500

5^h 27^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	938	27.0	+23 4	7.8	8.8	Ko	2	2,2	37388i	51	1112	27.4	-18 48	8.5	9.6	K2	5	..	18522b
2	931	27.0	-1 32	9.7	9.7	B9	3	..	12391b	52	1889	27.4	-43 46	8.0	8.7	G5	4	..	12756b
3	426	27.0	-60 22	9.9	9.9	Ao	1	..	38371b	53	1884	27.4	-47 9	5.54	6.4	G5	..	5,10	56,121
4	66	27.0	-84 23	8.7	8.7	B8	7	1,4	20557b	54	362	27.5	+70 18	6.85	6.85	Ao	8	..	38112i
5	254	27.1	+74 13	8.7	9.7	Ko	2	..	37343i	55	799	27.5	+61 20	8.0	8.8	G5	2	..	36654i
6	1030	27.1	+32 40	6.64	7.82	K5	3	0,4	36997i	56	868	27.5	+10 2	9.4	9.8	F5	2	..	39685b
7	939	27.1	+14 8	8.8	9.4	Go	2	..	37602i	57	926	27.5	+7 16	7.7	8.5	G5	4	0,2	39685b
8	814	27.1	+12 21	9.2	9.5	Fo	1	..	38223i	58	986	27.5	-0 4	6.58	7.76	K5	6	..	37594i
9	865	27.1	+10 0	8.72	9.54	G5	2	5,3	38167i	59	1163	27.5	-4 40	9.2	9.2	B9	4	0,3	10366b
10	866	27.1	+9 35	8.4	8.4	Ao	4	..	38223i	60	1212	27.5	-6 28	8.6	8.6	Ao	4	1,5	4898m
11	991	27.1	+2 12	8.7	9.3	Go	3	..	37594i	61	1165	27.5	-16 45	7.18	7.96	G5	5	..	20485b
12	1106	27.1	-7 23	4.64	4.47	B3	..	R	56,80	62	1188	27.5	-21 2	9.2	10.1	Ko	2	..	41088b
13	1105	27.1	-7 48	9.0	9.0	Ao	3	0,2	4898m	63	1186	27.5	-21 50	9.5	11.0	Ko	1	..	41088b
14	1068	27.1	-15 17	8.4	8.4	Ao	3	..	20485b	64	3166	27.5	-24 53	8.40	8.6	Ao	4	..	18557b
15	1106	27.1	-20 35	10.1	10.4	A2	2	..	41088b	65	2493	27.5	-25 48	9.4	9.5	F5	3	..	41088b
16	2230	27.1	-28 37	7.9	8.4	G5	4	..	12398b	66	2345	27.5	-35 27	9.0	9.1	Ao	3	..	14690b
17	2389	27.1	-32 11	8.0	8.4	Ao	5	0,3	14690b	67	879	27.5	-53 21	8.0	8.6	F5	6	..	20548b
18	2242	27.1	-37 17	8.0	9.1	Go	4	..	20707b	68	178	27.5	-79 46	9.5	10.6	K2	2	..	15162b
19	1885	27.1	-43 40	7.6	9.0	Ko	4	..	12756b	69	482	27.6	+65 3	7.80	7.86	A2	4	..	36654i
20	1880	27.1	-47 9	6.52	6.9	Fo	8	..	12756b	70	536	27.6	+64 6	6.03	6.01	B9	10	..	36654i
21	..	27.1	-68 55	..	..	Oa	..	..	76,28	71	1026	27.6	+46 6	8.5	8.9	F5	2	..	38940i
22	1288	27.2	+48 58	7.74	8.16	F5	4	..	37366i	72	1237	27.6	+44 41	9.0	9.0	Ao	1	..	38940i
23	942	27.2	+22 53	8.6	9.1	F8	3	7,2 R	37388i	73	1088	27.6	+34 34	8.6	8.6	Ao	2	..	38921i
24	953	27.2	+19 57	9.25	10.03	G5	2	..	37388i	74	1087	27.6	+34 9	8.5	9.9	Ma	..	..	M
25	992	27.2	+2 34	8.1	8.4	F2	5	..	37594i	75	791	27.6	+27 6	8.0	9.0	Ko	2	..	38921i
26	933	27.2	-1 40	8.7	8.7	B8	5	..	12391b	76	877	27.6	+18 29	5.50	5.33	B3p	..	1,9 R	56,80
27	1130	27.2	-3 38	10.4	10.4	Ao	2	..	4898m	77	848	27.6	+11 8	8.1	8.9	G5	2	..	38223i
28	1160	27.2	-4 15	9.2	10.4	K5	2	0,1	4898m	78	994	27.6	+2 36	9.0	9.3	F2	3	..	37594i
29	1199	27.2	-19 22	9.2	9.2	A5	2	..	18522b	79	1072	27.6	-15 38	8.2	9.2	Ko	3	5,2	18522b
30	428	27.2	-60 57	9.2	9.1	F5	3	..	38371b	80	1162	27.6	-17 50	8.0	8.5	F8	5	..	18522b
31	465	27.2	-61 21	8.7	9.3	Go	3	..	38371b	81	1189	27.6	-21 52	9.7	9.8	A5	3	..	41088b
32	328	27.2	-74 43	8.03	8.6	Go	6	..	15162b	82	2820	27.6	-23 1	9.4	9.5	F2	5	..	41088b
33	336	27.3	+69 20	9.2	10.4	K5	..	..	M	83	2248	27.6	-37 47	9.0	10.5	K5	1	..	42101b
34	1334	27.3	+42 22	8.5	8.6	A5	3	..	37391i	84	375	27.6	-68 42	6.15	7.3	Fo	6	0,6	8811b
35	1222	27.3	+41 3	7.06	8.24	K5	2	0,2	37391i	85	205	27.7	+77 5	8.2	9.0	G5	3	0,2	37558i
36	925	27.3	+7 28	8.8	8.8	Ao	2	..	39685b	86	206	27.7	+76 25	8.4	8.4	Ao	6	0,4	37558i
37	955	27.3	+3 23	9.7	9.8	A5	2	..	39685b	87	973	27.7	+52 30	8.6	9.0	F5	2	..	37366i
38	1108	27.3	+1 0	8.54	9.72	K5	1	..	12391b	88	1370	27.7	+49 30	7.58	8.58	Ko	4	..	37366i
39	1161	27.3	-4 23	9.2	10.4	K5	1	3,1	4898m	89	989	27.7	+20 24	6.09	6.04	B8	9	5,7	37602i
40	1162	27.3	-4 35	9.0	9.0	B9	4	..	4898m	90	936	27.7	-1 6	9.4	9.4	B9	3	..	12391b
41	1209	27.3	-6 47	8.2	8.2	B9	7	..	4898m	91	935	27.7	-1 40	5.30	5.11	B2	..	1,8	56,80
42	1210	27.3	-10 5	8.41	8.41	Ao	3	0,3	10366b	92	1285	27.7	-2 6	9.2	9.2	B9	3	..	12391b
43	1138	27.3	-22 22	10.4	10.7	G	1	..	41088b	93	1215	27.7	-6 4	9.2	10.2	Ko	1	..	4898m
44	2816	27.3	-23 30	9.1	10.1	Ko	3	..	41088b	94	3170	27.7	-24 1	8.6	8.9	Ao	3	..	18557b
45	1083	27.4	+33 20	8.4	8.4	Ao	4	..	38921i	95	2234	27.7	-28 11	8.1	9.2	Ko	2	..	12398b
46	854	27.4	+24 33	6.92	6.87	B8	5	2,5	37388i	96	2316	27.7	-29 45	8.0	8.8	F5	4	5,3	14690b
47	942	27.4	+23 16	8.8	8.6	B2	2	..	37388i	97	2348	27.7	-35 33	3.92	4.92	Ko	..	R	28,197
48	851	27.4	+15 53	8.1	8.6	F8	4	..	37602i	98	393	27.7	-70 9	8.46	9.2	K2	5	..	20540b
49	1053	27.4	+2 1	8.7	8.7	B9	3	..	37594i	99	1040	27.8	+56 20	8.4	8.4	Ao	3	..	37407i
50	1211	27.4	-6 29	9.5	9.5	Ao	2	..	4898m	100	990	27.8	+20 57	9.1	9.1	B9	2	..	37388i

THE HENRY DRAPER CATALOGUE.

36600

5^h 27^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	997	27.8	+ 8 28	7.9	8.9	Ko	2	..	38223i	51	1337	28.2	+42 14	8.8	9.3	F8	2	..	38940i
2	929	27.8	+ 7 4	var.	var.	Nb	1	0,1 R	39685b	52	993	28.2	+21 0	9.0	9.0	Ao	2	..	37388i
3	954	27.8	+ 5 12	8.51	8.59	A3	4	..	39685b	53	947	28.2	+14 15	5.58	5.41	B3	..	0, R	1794c
4	995	27.8	+ 2 26	9.0	9.0	Ao	4	R	39685b	54	999	28.2	+ 2 35	9.4	9.4	Ao	3	..	39685b
5	988	27.8	- 0 47	8.4	8.4	B9	3	..	37594i	55	1289	28.2	- 5 25	8.6	8.6	B9	6	0,5	4898m
6	1285	27.8	- 5 2	8.55	8.55	Ao	3	2,4	4898m	56	1168	28.2	-16 24	6.83	7.90	K2	5	..	20485b
7	1216	27.8	- 6 58	9.2	9.2	Ao	3	1,3	4898m	57	1191	28.2	-21 22	9.0	9.8	Ko	3	..	41088b
8	2452	27.8	-30 57	8.0	8.7	F2	4	..	14690b	58	2454	28.2	-30 55	9.8	9.3	F8	2	..	14690b
9	1915	27.8	-41 41	8.5	9.4	A	1	..	14691b	59	429	28.2	-60 5	9.48	9.0	F8	2	..	38371b
10	1886	27.8	-47 17	8.3	9.0	F8	4	..	12756b	60	478	28.2	-62 0	8.1	9.1	Ko	4	..	38371b
11	1807	27.8	-50 37	9.2	9.4	G5	3	..	12756b	61	442	28.2	-67 41	8.9	9.0	A2	3	..	38367b
12	824	27.8	-57 56	9.1	9.6	F8	1	..	20548b	62	1144	28.3	+45 25	8.0	8.0	B8	3	..	38940i
13	477	27.8	-62 10	9.3	9.9	Go	2	..	38371b	63	1238	28.3	+37 11	9.0	9.0	A	1	..	38124i
14	281	27.9	+72 8	8.2	8.3	A2	4	..	37343i	64	1092	28.3	+34 13	9.4	10.4	Ko	..	..	M
15	800	27.9	+61 10	8.2	9.0	G5	3	..	38907i	65	798	28.3	+27 59	8.0	8.0	B8	4	..	37525i
16	1236	27.9	+37 42	9.8	9.8	Ao	1	..	38124i	66	799	28.3	+27 50	8.2	9.3	K2	..	..	M
17	1286	27.9	- 2 16	9.2	9.2	B9	5	..	12391b	67	856	28.3	+15 31	7.27	7.77	F8	5	..	37602i
18	1141	27.9	-22 18	8.7	9.2	G5	6	..	41088b	68	1113	28.3	+ 0 33	8.4	8.4	B9	3	..	37594i
19	2824	27.9	-23 30	7.9	8.0	Ao	4	..	18557b	69	989	28.3	- 0 51	8.8	8.8	Ao	4	..	12391b
20	1916	27.9	-41 43	9.0	9.1	Ao	4	..	14691b	70	1166	28.3	- 4 26	9.2	9.2	Ao	4	1,4	4898m
21	394	27.9	-70 49	9.0	9.6	Go	3	..	15167b	71	1165	28.3	- 4 42	9.2	9.2	B9	3	0,3	4898m
22	300	27.9	-73 13	9.1	9.6	F8	1	..	20540b	72	1215	28.3	-10 33	8.0	9.1	K2	2	..	10366b
23	313	27.9	-75 42	9.7	10.5	G5	2	..	15162b	73	1166	28.3	-17 54	2.69	2.97	Fo	..	R	1088c
24	913	28.0	+54 51	9.9	9.9	A	2	..	37366i	74	1203	28.3	-19 11	8.5	9.2	K2	3	..	18522b
25	1174	28.0	+48 1	7.58	8.65	K2	2	0,2	37366i	75	1113	28.3	-20 26	9.7	9.7	G5	2	..	41088b
26	850	28.0	+26 49	7.7	7.8	A3	3	..	36997i	76	2331	28.3	-27 44	8.4	9.2	F5	1	..	12663b
27	958	28.0	+ 3 4	7.8	7.8	B8	6	1,5	37594i	77	1981	28.3	-42 48	9.2	9.2	A2	3	..	14691b
28	938	28.0	- 1 19	8.4	8.4	B8	6	1,4	12391b	78	914	28.4	+54 20	5.96	7.14	K5	6	0,6	37407i
29	1164	28.0	- 4 38	8.0	7.9	B5	6	0,4	4898m	79	1176	28.4	+47 55	8.9	8.9	Ao	2	..	37366i
30	1218	28.0	- 6 34	9.2	9.2	A	2	..	4898m	80	1226	28.4	+41 28	8.6	8.6	Ao	2	..	38940i
31	1114	28.0	- 7 43	9.2	10.2	K	1	..	4898m	81	1013	28.4	+31 34	9.4	9.7	Fo	2	..	37525i
32	1108	28.0	-20 17	9.1	9.9	Ko	2	..	41088b	82	1056	28.4	+ 1 38	9.4	10.2	G5	2	..	37594i
33	2826	28.0	-23 15	10.8	10.4	Go	2	..	41088b	83	990	28.4	- 0 30	9.0	10.0	Ko	2	..	12391b
34	2377	28.0	-33 28	8.0	8.7	G5	5	..	14690b	84	942	28.4	- 1 8	9.2	9.2	B9	3	..	12391b
35	1810	28.0	-50 11	7.94	9.1	K5	4	..	12756b	85	1180	28.4	-13 51	9.2	9.6	F5	2	..	20485b
36	864	28.0	-56 18	9.1	9.8	F8	1	..	20548b	86	1523	28.4	-51 23	9.3	9.6	F8	2	..	24143b
37	375	28.0	-72 33	9.6	10.6	Ko	2	..	15167b	87	867	28.4	-56 41	9.0	9.8	G5	1	..	20548b
38	177	28.1	+80 20	8.2	9.0	G5	4	..	37558i	88	471	28.4	-61 55	8.7	8.8	Ko	6	..	38371b
39	890	28.1	+60 32	8.0	8.0	Ao	3	..	36654i	89	479	28.4	-62 23	6.49	7.9	K2	7	..	38371b
40	1239	28.1	+44 52	8.6	8.7	A3	3	..	38940i	90	474	28.4	-64 59	10.4	10.8	F5	2	..	38371b
41	1310	28.1	+43 11	7.34	8.12	G5	3	..	37391i	91	596	28.5	+63 51	9.2	9.2	Ao	2	..	38907i
42	938	28.1	+30 32	8.8	8.8	A	2	..	37525i	92	1311	28.5	+43 5	8.8	8.9	A2	2	..	37391i
43	794	28.1	+27 16	7.8	8.1	Fo	3	..	36997i	93	950	28.5	+14 56	8.74	8.74	Ao	2	..	37602i
44	818	28.1	+12 33	9.2	9.2	Ao	1	..	38233i	94	991	28.5	- 0 20	9.7	9.7	Ao	2	..	12391b
45	998	28.1	+ 2 18	9.4	9.4	B9	4	..	37594i	95	943	28.5	- 1 14	5.37	5.18	B2	..	1,8-	56,80
46	939	28.1	- 1 48	6.46	6.29	B3	..	0,5-	56,80	96	1135	28.5	- 3 11	9.0	9.8	G5	3	5,1	4898m
47	2075	28.1	-38 53	9.4	9.4	Go	3	..	42101b	97	1115	28.5	- 7 40	8.6	8.6	Ao	5	0,3	4898m
48	1975	28.1	-42 23	6.98	7.4	A5	10	..	14691b	98	1181	28.5	-12 58	8.6	8.6	Ao	2	..	12770b
49	735	28.1	-52 31	8.7	9.6	Ko	3	..	24143b	99	1146	28.5	-22 19	10.4	10.2	F5	1	..	41088b
50	377	28.1	-68 9	8.8	9.8	Ko	3	..	38367b	100	2835	28.5	-23 37	10.5	10.4	K	1	R	41088b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

36700

5^h 28^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2335	28.5	-27 21	9.4	9.3	A3	1	..	12663b	51	396	28.8	-70 36	9.6	9.6	A	3	..	15167b
2	2077	28.5	-38 38	9.0	9.4	Ko	2	..	14691b	52	301	28.8	-73 2	8.0	9.2	K5	3	E	15162b
3	1893	28.5	-47 22	10.3	10.5	A5	1	..	12756b	53	322	28.8	-76 59	9.5	10.5	Ko	3	..	15162b
4	883	28.5	-53 19	9.5	10.1	Go	1	..	39700b	54	845	28.9	+58 29	8.5	8.9	F5	4	..	37407i
5	475	28.5	-65 32	6.76	7.3	Go	8	..	38371b	55	1246	28.9	+44 41	8.0	8.0	B9	3	..	38940i
6	1242	28.6	+37 50	7.50	7.64	A5	6	..	37365i	56	1247	28.9	+44 15	7.17	7.59	F5	4	..	37391i
7	892	28.6	+21 33	9.4	9.8	F5	2	..	37388i	57	1174	28.9	+35 44	8.8	9.2	F5	1	..	38124i
8	1001	28.6	+ 2 40	9.4	9.4	Ao	2	..	37594i	58	868	28.9	+24 13	7.8	8.8	Ko	5	..	38084i
9	992	28.6	- 0 6	8.03	8.03	Ao	4	..	12391b	59	1003	28.9	+ 3 0	8.4	8.5	A2	5	0.4	37594i
10	1136	28.6	- 3 32	6.98	8.05	K2	7	0.2	4898m	60	996	28.9	- 0 32	8.7	8.7	B8	5	..	37594i
11	1137	28.6	- 3 42	9.6	10.2	Go	3	..	4898m	61	1208	28.9	-19 25	9.7	9.4	A3	1	..	18522b
12	1223	28.6	- 6 8	9.7	9.8	A3	2	..	4898m	62	2507	28.9	-25 26	7.35	8.9	Ma	3	..	18557b
13	1224	28.6	- 6 37	9.2	10.3	K2	1	..	4898m	63	2302	28.9	-36 10	7.9	9.2	K5	2	..	20707b
14	1222	28.6	- 6 47	9.9	10.4	F8	1	..	4898m	64	2304	28.9	-36 17	8.0	8.8	Go	3	..	20707b
15	1167	28.6	-17 20	8.0	9.2	K5	1	..	18522b	65	846	28.9	-54 59	9.08	9.5	F5	3	..	20548b
16	3187	28.6	-24 50	9.27	9.2	A2	2	..	18557b	66	344	28.9	-71 18	9.0	9.3	Fo	5	..	20540b
17	2381	28.6	-33 36	8.1	9.4	K2	3	..	14690b	67	314	28.9	-75 46	7.9	8.5	Go	10	..	15162b
18	472	28.6	-61 35	9.2	9.6	F5	2	..	38371b	68	339	29.0	+69 55	7.04	8.04	Ko	6	..	38112i
19	1178	28.7	+47 40	6.05	6.33	Fo	7	0.7	37391i	69	597	29.0	+63 13	9.2	9.6	F5	3	..	38154i
20	1227	28.7	+41 14	8.4	8.4	Ao	3	..	38940i	70	1041	29.0	+56 26	7.49	8.49	Ko	3	5.3	37366i
21	1244	28.7	+37 57	7.8	7.9	A2	6	..	37365i	71	1179	29.0	+47 5	9.2	9.3	A2	2	..	38940i
22	1037	28.7	+32 40	8.8	8.8	Ao	3	1.4	36997i	72	1145	29.0	+45 36	8.0	8.0	B9	3	..	37391i
23	942	28.7	+30 51	8.0	8.4	F5	3	..	36997i	73	1191	29.0	+36 58	8.1	8.2	A5	2	..	38124i
24	856	28.7	+26 54	8.0	8.5	F8	4	..	36997i	74	944	29.0	+30 32	8.2	8.3	A3	3	..	36997i
25	857	28.7	+15 44	8.2	8.6	F5	3	..	37602i	75	880	29.0	+18 3	9.2	9.8	Go	1	..	37602i
26	993	28.7	- 0 8	8.7	8.7	Ao	3	..	12391b	76	975	29.0	+ 4 45	8.7	8.7	B8	5	..	39685b
27	1175	28.7	- 9 28	8.7	8.8	A5	3	..	10366b	77	964	29.0	+ 3 42	5.32	5.38	A2	..	2, R	56,80
28	1193	28.7	-21 6	8.6	9.1	Fo	6	..	41088b	78	997	29.0	- 0 20	9.2	9.2	Ao	2	..	12391b
29	1192	28.7	-21 16	9.2	9.7	Go	3	..	41088b	79	949	29.0	- 1 6	6.18	6.01	B3	..	0.6-	56,80
30	1195	28.7	-21 49	9.1	9.7	Ko	3	..	41088b	80	950	29.0	- 1 32	6.22	7.22	Ko	..	5.5-	56,80
31	2840	28.7	-23 29	10.1	9.5	Go	3	..	41088b	81	948	29.0	- 1 48	8.52	8.50	B9	4	..	12391b
32	2284	28.7	-26 23	9.6	9.8	G	2	..	41088b	82	1295	29.0	- 5 41	9.5	9.9	F5	3	3.2-	12391b
33	2464	28.7	-30 38	9.1	8.7	B9	3	..	14690b	83	1226	29.0	- 6 42	9.2	9.2	Ao	3	0.2	4898m
34	1892	28.7	-46 0	5.80	7.7	K2	..	2.7	56,121	84	1196	29.0	-21 58	9.7	9.7	Go	2	..	41088b
35	1890	28.7	-46 8	8.6	9.7	Ko	3	..	12756b	85	1148	29.0	-22 0	10.1	9.8	Ao	2	..	41088b
36	519	28.7	-58 37	9.1	9.3	Ko	1	..	20548b	86	2385	29.0	-33 24	8.7	8.7	Ao	4	..	14690b
37	183	28.8	+79 34	7.86	8.64	G5	4	5.2	37558i	87	1819	29.0	-50 8	8.10	9.0	Ko	4	..	12756b
38	393	28.8	+67 10	9.5	10.3	G5	2	..	38112i	88	736	29.0	-52 47	9.1	9.9	K	1	..	24143b
39	858	28.8	+26 29	9.0	9.1	A5	2	..	37525i	89	830	29.0	-57 14	6.94	7.5	A5	5	2.9	20516b
40	922	28.8	+13 56	8.2	8.2	Ao	3	..	37602i	90	829	29.0	-57 28	8.8	8.9	A3	5	..	20548b
41	1058	28.8	+ 1 20	6.42	6.30	B5	7	2.7	37594i	91	302	29.0	-73 45	7.6	8.4	G5	7	..	15162b
42	1292	28.8	- 5 15	9.9	10.4	F8	1	..	4898m	92	1192	29.1	+36 3	8.4	9.2	G5	2	..	38124i
43	1225	28.8	- 6 27	9.2	9.8	G	2	..	4898m	93	866	29.1	+25 46	7.7	7.7	Ao	3	..	38921i
44	1118	28.8	-20 29	9.0	10.0	Ko	2	..	41088b	94	1002	29.1	+20 10	8.85	8.85	Ao	2	..	37388i
45	3191	28.8	-24 19	9.0	9.5	Ko	2	..	41088b	95	966	29.1	+19 24	8.8	9.6	G5	2	..	37388i
46	2285	28.8	-26 19	8.2	9.5	K2	3	..	41088b	96	881	29.1	+18 33	9.0	9.0	Ao	2	..	37388i
47	2082	28.8	-38 16	8.0	8.2	Go	5	..	14691b	97	957	29.1	+ 5 20	8.1	8.1	Ao	3	..	14071i
48	1942	28.8	-40 8	10.0	9.7	Ao	3	..	14691b	98	1176	29.1	- 9 7	8.6	9.0	F5	3	5.2	12770b
49	1816	28.8	-50 32	8.5	9.0	G5	4	..	12756b	99	1183	29.1	-13 36	8.8	8.8	Ao	1	..	12770b
50	476	28.8	-65 5	8.46	8.6	A2	6	..	38371b	100	1209	29.1	-19 22	8.6	8.9	Ko	4	..	18522b

THE HENRY DRAPER CATALOGUE.

36800

5^h 29^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3193	m. 29.1	• 24 49	9.8	10.7	K2	1	..	41088b	51	1376	m. 29.5	• +49 44	8.8	9.8	Ko	2	..	37366i
2	2289	29.1	-26 38	8.6	8.9	F2	4	..	41088b	52	1345	29.5	+42 27	8.5	8.9	F5	3	..	37391i
3	2249	29.1	-28 14	9.6	9.5	A	1	..	12398b	53	896	29.5	+21 8	8.6	9.6	Ko	2	..	38084i
4	1771	29.1	-49 6	7.5	7.4	B8	5	0,9	20643b	54	1210	29.5	-19 30	8.8	8.6	A2	6	..	18522b
5	418	29.1	-66 46	8.2	9.2	Ko	3	E	38367b	55	2393	29.5	-33 2	9.4	9.7	Ko	2	..	1469ob
6	895	29.2	+59 18	7.6	7.6	B9	5	1,5	37407i	56	2313	29.5	-34 34	9.4	9.7	Go	2	..	1469ob
7	951	29.2	+23 27	9.0	9.1	A3	2	..	37388i	57	1290	29.6	+48 10	9.5	9.6	A2	2	..	37366i
8	934	29.2	+7 29	9.7	9.8	A5	2	..	39685b	58	1198	29.6	+36 20	8.6	8.7	A2	1	..	38124i
9	965	29.2	+3 30	8.7	8.7	Ao	2	..	37594i	59	806	29.6	+27 36	6.47	7.47	Ko	4	..	36997i
10	1059	29.2	+1 17	8.7	8.7	B9	3	..	37594i	60	930	29.6	+13 13	8.3	8.7	F5	4	..	37602i
11	951	29.2	-1 59	7.07	7.05	B9	4	1,3 R	37594i	61		29.6	+9 52	3.66	..	Oe5	..	R	2436c
12	1139	29.2	-3 31	9.6	10.2	Go	4	2,2	4898m	62	879	29.6	+9 52	5.56	..	Oe5	..	R	2436c
13	1227	29.2	-6 55	8.6	8.6	B9	5	0,3	4898m	63	952	29.6	-1 49	9.2	9.2	Ao	4	..	12391b
14	1119	29.2	-7 6	6.61	7.61	Ko	4	0,8	3755oi	64	1141	29.6	-3 45	8.6	9.6	Ko	5	0,3	4898m
15	1201	29.2	-12 32	8.7	9.2	F8	3	..	18414b	65	1171	29.6	-4 33	8.0	8.0	B9	4	1,6	3755oi
16	831	29.2	-57 4	8.9	9.5	K2	3	..	20548b	66	1301	29.6	-5 47	9.4	9.4	Ao	2	..	10366b
17	481	29.2	-62 31	8.5	9.1	Go	1	..	38371b	67	1122	29.6	-7 28	9.1	9.1	Ao	3	0,2	4898m
18	419	29.2	-66 41	8.7	9.1	F5	3	E	38367b	68	1221	29.6	-10 7	8.61	9.39	G5	2	..	10366b
19	954	29.3	+23 58	5.28	5.11	B3	..	0,10	56,80	69	1082	29.6	-15 21	8.0	8.4	F5	2	..	20485b
20	861	29.3	+15 34	7.3	7.3	B9	6	..	37602b	70	1119	29.6	-20 43	8.6	9.2	F5	4	..	41088b
21	861	29.3	+11 5	8.8	8.9	A2	1	..	38223i	71	1199	29.6	-21 14	8.5	9.2	Ko	4	..	41088b
22	877	29.3	+9 25	4.53	4.29	Bo	..	3, R	1617c	72	1151	29.6	-22 52	9.4	9.5	Go	3	..	41088b
23	961	29.3	+6 3	7.8	7.9	A2	5	1,3	37594i	73	2479	29.6	-30 50	8.4	8.7	Ko	3	..	1469ob
24	958	29.3	+5 35	6.71	6.59	B5	7	2,8	14071b	74	2367	29.6	-35 13	5.75	6.9	Ko	9	..	1469ob
25	999	29.3	-0 50	9.0	9.0	B8	3	..	37594i	75	1823	29.6	-50 49	9.3	9.1	F5	3	..	24143b
26	1297	29.3	-2 27	8.6	8.6	B9	4	..	12391b	76	452	29.6	-64 0	6.28	6.8	Fo	10	..	38371b
27	1296	29.3	-2 57	7.8	7.7	B5	6	..	3755oi	77	345	29.6	-71 11	9.0	9.3	Fo	3	..	20540b
28	1170	29.3	-17 51	8.2	9.2	Ko	3	..	18522b	78	1180	29.7	+47 53	7.34	8.12	G5	3	0,2	37366i
29	2539	29.3	-31 19	9.1	9.3	Ao	2	..	1469ob	79	899	29.7	+21 20	7.8	7.6	B2	4	..	38084i
30	2038	29.3	-39 40	9.0	10.3	Ko	2	..	14691b	80	1009	29.7	+20 50	8.6	9.2	G	2	..	37388i
31	1899	29.3	-47 17	9.2	10.8	G5	1	..	12756b	81	818	29.7	+10 10	5.59	5.54	B8	8	..	38223i
32	430	29.3	-60 53	8.5	9.1	F5	3	..	38371b	82	953	29.7	-1 1	8.1	8.9	G5	3	..	37594i
33	1218	29.4	+38 58	8.1	9.2	K2	2	..	38124i	83	1172	29.7	-4 28	8.0	8.0	B8	7	0,4	4898m
34	1195	29.4	+36 33	8.8	8.8	A	1	R	38124i	84	1303	29.7	-5 46	9.8	9.8	A	1	..	4898m
35	1196	29.4	+36 11	8.4	9.4	Ko	1	..	38124i	85	1167	29.7	-8 17	8.6	8.9	F2	6	0,5-	1277ob
36	952	29.4	+22 22	8.6	9.1	F8	3	..	37388i	86	1224	29.7	-10 35	7.52	8.70	K5	3	3,3	10366b
37	971	29.4	+19 42	9.2	9.3	A2	3	2,4	37388i	87	1153	29.7	-22 48	8.8	9.1	Fo	5	..	41088b
38	927	29.4	+13 21	8.3	8.3	B8	4	..	37602i	88	2315	29.7	-34 23	6.82	7.2	A5	7	3,8	9061b
39	962	29.4	+6 30	8.3	9.3	Ko	4	..	39685b	89	1903	29.7	-47 33	7.6	8.1	G5	6	..	12756b
40	1000	29.4	-0 5	6.56	7.34	G5	6	..	37594i	90	398	29.7	-70 59	8.5	9.0	F8	4	..	20540b
41	1002	29.4	-0 27	8.8	8.8	B9	2	..	37594i	91	1346	29.8	+40 7	6.18	7.18	Ko	5	..	37391i
42	1168	29.4	-4 26	9.1	9.1	B9	5	1,2	4898m	92	1048	29.8	+32 16	8.8	8.9	A2	3	0,2	37525i
43	1167	29.4	-4 52	6.84	6.92	A3	6	1,8	3755oi	93	864	29.8	+26 12	8.5	8.5	B8	5	..	37525i
44	1214	29.4	-11 26	8.0	8.3	Fo	2	..	18414b	94	883	29.8	+9 42	7.7	7.7	B9	3	..	38223i
45	1122	29.4	-18 45	8.0	8.3	Fo	6	0,3	18522b	95	881	29.8	+9 33	7.7	7.5	B3	6	..	38223i
46	3196	29.4	-24 24	7.5	8.1	F8	4	..	18557b	96	884	29.8	+9 6	7.9	9.1	K5	1	..	38223i
47	2312	29.4	-34 29	10.0	9.5	F8	2	..	1469ob	97	962	29.8	+5 24	8.5	8.5	B8	3	..	14071i
48	2085	29.4	-38 35	5.45	7.2	K2	..	2,10	56,121	98	1005	29.8	-0 11	7.9	7.8	B5	5	..	37594i
49	421	29.4	-66 31	8.1	8.1	Ao	7	..	38371b	99	1304	29.8	-5 12	10.3	10.3	Ao	2	..	4898m
50	900	29.5	+58 1	7.8	8.8	Ko	4	..	37407i	100	2854	29.8	-22 59	10.3	10.0	K2	1	..	41088b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

36900

5^h 29^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2516	29.8	-25 23	9.3	9.5	G5	4	..	41088b	51	938	30.1	+ 7 19	8.8	8.9	A3	4	..	39685b
2	1936	29.8	-41 47	8.7	10.3	Ko	2	0,2	20649b	52	939	30.1	+ 7 11	8.3	8.8	F8	4	..	39685b
3	1857	29.8	-48 2	8.9	9.0	Ao	4	..	12756b	53	964	30.1	+ 5 45	8.8	9.2	F5	2	..	39685b
4	1856	29.8	-48 16	9.7	9.6	A3	2	..	12756b	54	1009	30.1	- 0 48	8.1	7.9	B3	..	2,6	56,80
5	80	29.9	+85 9	6.41	7.41	Ko	5	..	37546i	55	955	30.1	- 1 28	9.6	9.7	A2	2	..	12391b
6	898	29.9	+59 42	8.6	8.7	A2	3	..	37407i	56	1142	30.1	- 3 46	9.1	9.6	F8	4	..	4898m
7	1230	29.9	+41 12	8.4	8.4	Ao	3	..	38940i	57	1178	30.1	- 4 26	9.1	9.1	Ao	3	..	4898m
8	1248	29.9	+37 20	9.8	9.8	Ao	1	..	38124i	58	1179	30.1	- 4 48	8.0	7.9	B5	6	4,4	4898m
9	1020	29.9	+31 56	7.7	8.1	F5	3	..	36997i	59	1233	30.1	- 6 5	5.58	5.36	Bi	..	R	28,197
10	873	29.9	+24 41	8.4	8.8	F5	2	..	38084i	60	1234	30.1	- 6 5	4.67	4.45	Bi	..	R	28,197
11	887	29.9	+18 42	8.1	9.3	K5	3	..	37602i	61	1228	30.1	- 9 58	8.56	8.70	A5	4	3,4	10366b
12	956	29.9	+14 21	8.3	8.3	B9	3	..	37602i	62	1219	30.1	-11 52	8.0	8.0	Ao	3	..	20485b
13	819	29.9	+10 27	8.5	8.6	A3	3	..	38223i	63	1201	30.1	-21 2	9.6	9.7	A2	3	..	41088b
14	1005	29.9	+ 8 38	7.58	8.93	Mb	6	5,2	39685b	64	3207	30.1	-24 25	10.1	9.5	Ao	4	..	41088b
15	1006	29.9	- 0 53	9.0	9.0	B9	3	..	37594i	65	2348	30.1	-29 55	6.34	6.6	Ao	9	..	9061b
16	1173	29.9	- 4 10	6.68	6.66	B9	6	0,9	37550i	66	2276	30.1	-37 37	8.8	9.2	G5	2	E	20707b
17	1305	29.9	- 5 38	8.4	8.4	B9	6	0,4 R	4898m	67	2045	30.1	-39 13	9.0	9.7	Ko	2	..	14691b
18	1231	29.9	- 6 4	9.2	9.2	A	4	..	4898m	68	2044	30.1	-39 31	9.4	9.2	Fo	4	..	14691b
19	1232	29.9	- 6 4	10.6	10.6	A	2	..	4898m	69	888	30.1	-53 53	8.3	9.3	K5	2	..	20548b
20	1124	29.9	- 7 16	6.93	7.93	Ko	6	0,3	4898m	70	834	30.1	-57 20	8.6	9.5	K5	3	..	20548b
21	1173	29.9	-17 13	9.0	9.6	Go	2	..	18522b	71	298	30.2	+73 56	6.79	7.07	Fo	6	..	37343i
22	1125	29.9	-18 24	7.9	7.9	Ao	5	1,6	44350b	72	398	30.2	+68 45	var.	var.	R8	..	R	M
23	1127	29.9	-18 53	7.16	8.23	K5	5	3,5	20485b	73	1252	30.2	+44 32	7.34	8.12	G5	4	..	37391i
24	1200	29.9	-21 36	9.2	10.2	Ko	1	..	41088b	74	1202	30.2	+36 59	8.1	8.9	G5	2	..	38124i
25	2413	29.9	-32 41	8.5	9.3	Ko	3	..	14690b	75	972	30.2	+19 29	7.17	7.15	B9	5	0,8	37388i
26	1997	29.9	-42 1	8.9	9.7	G5	3	..	14691b	76	974	30.2	+19 7	8.4	8.8	F5	3	..	37388i
27	1030	30.0	+46 46	8.0	9.0	Ko	2	..	37391i	77	890	30.2	+18 30	8.9	9.9	Ko	1	..	37602i
28	1314	30.0	+43 34	8.2	9.2	Ko	3	..	38940i	78	813	30.2	+16 5	8.4	9.5	K2	2	..	37602i
29	1231	30.0	+41 46	7.10	7.60	F8	5	..	37391i	79	979	30.2	+ 4 46	8.8	8.8	Ao	3	..	39685b
30	1249	30.0	+37 5	8.2	8.7	F8	3	..	38124i	80	956	30.2	- 1 58	9.6	9.6	Ao	3	R	12391b
31	949	30.0	+30 31	8.2	9.0	G5	3	0,3	38921i	81	1311	30.2	- 5 16	8.4	8.4	B8	7	0,4	4898m
32	824	30.0	+12 47	8.5	8.5	Ao	2	..	37602i	82	1313	30.2	- 5 32	9.1	8.9	B	3	R	4898m
33	1006	30.0	+ 8 51	8.5	8.5	Ao	2	..	38223i	83	1312	30.2	- 5 56	9.1	9.1	B9	3	..	4898m
34	964	30.0	+ 6 42	8.2	8.3	A2	2	..	14071b	84	1168	30.2	- 8 3	8.8	9.6	G5	1	..	10366b
35	1007	30.0	- 0 20	8.4	8.4	B8	4	..	37594i	85	1174	30.2	-17 37	8.5	8.6	A3	5	..	18522b
36	1176	30.0	- 4 25	8.6	8.6	B8	6	..	4898m	86	1202	30.2	-21 28	9.4	10.0	Go	1	..	41088b
37	1177	30.0	- 4 36	10.4	10.4	A	1	..	4898m	87	1859	30.2	-48 35	9.9	9.6	G5	2	..	12756b
38	1175	30.0	- 4 50	8.68	8.63	B8	3	2,4	10366b	88	186	30.2	-78 25	9.0	9.1	A3	5	1,8	20557b
39	1308	30.0	- 5 34	9.5	9.5	B9	3	..	4898m	89	149	30.3	+83 34	8.8	9.8	Ko	5	..	38330i
40	1155	30.0	-22 12	9.9	10.0	F8	2	..	41088b	90	314	30.3	+71 35	8.0	8.1	A2	4	..	37343i
41	2261	30.0	-28 13	7.9	9.5	K5	2	..	12398b	91	1233	30.3	+41 58	9.2	9.2	Ao	2	..	38940i
42	2483	30.0	-30 1	7.84	8.2	A2	5	..	14690b	92	1228	30.3	+38 56	8.6	8.6	Ao	2	..	38124i
43	2548	30.0	-31 31	8.0	9.7	Ko	2	..	44364b	93	811	30.3	+27 51	8.6	8.6	B8	4	..	37525i
44	2274	30.0	-37 47	8.7	9.1	A	3	E	42101b	94	879	30.3	+25 53	6.32	6.74	F5	5	..	36997i
45	1912	30.0	-43 7	8.3	9.9	K2	3	..	14691b	95	878	30.3	+25 32	8.6	9.2	Go	2	E	38084i
46	918	30.1	+54 53	8.46	9.24	G5	1	..	37366i	96	957	30.3	- 1 6	9.6	9.7	A2	2	..	12391b
47	1315	30.1	+44 1	7.42	7.92	F8	4	R	38940i	97	1305	30.3	- 2 27	9.1	9.1	Ao	4	..	12391b
48	1226	30.1	+44 1	8.0	9.0	Ao	3	..	38124i	98	1180	30.3	- 4 40	9.1	9.1	Ao	2	1,2	4898m
49	868	30.1	+38 16	8.7	8.8	A3	2	..	38223i	99	1314	30.3	- 5 53	9.1	9.1	B9	4	0,3	4898m
50		30.1	+11 54							100	1237	30.3	- 6 0	8.4	8.3	B5	5	3,5	4898m

THE HENRY DRAPER CATALOGUE.

37000

5^h 30^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1238	30.3	- 6 38	8.6	8.6	Ao	4	2,3	4898m	51	889	30.6	+ 9 46	8.9	8.9	B9	4	..	39685b
2	2861	30.3	-23 35	8.4	8.5	Go	6	..	41088b	52	1011	30.6	+ 8 3	8.9	9.5	Go	2	..	39685b
3	1942	30.3	-41 0	8.2	8.2	F5	6	..	14691b	53	982	30.6	+ 4 58	7.76	8.18	F5	4	..	37594i
4	1909	30.3	-47 45	7.51	7.1	Ao	7	..	12756b	54	1129	30.6	+ 0 40	9.1	9.1	Ao	3	..	37590i
5	434	30.3	-60 52	8.6	9.6	K2	2	..	30371b	55	1146	30.6	- 3 19	6.33	6.21	B5	6	3,10	37550i
6	197	30.4	+78 12	8.2	8.8	Go	5	5,2	37558i	56	1148	30.6	- 3 24	9.0	9.0	B8	6	..	4898m
7	1042	30.4	+56 54	8.4	9.4	Ko	2	..	37407i	57	1147	30.6	- 3 38	10.0	10.0	Ao	3	0,2	4898m
8	1094	30.4	+51 23	7.9	8.9	Ko	5	5,3	37366i	58	1187	30.6	- 4 54	7.35	7.23	B5	6	..	4898m
9	1203	30.4	+50 28	8.0	8.3	Fo	4	..	37366i	59	1323	30.6	- 4 58	8.70	8.70	A	3	R	4898m
10	1252	30.4	+38 0	9.4	9.4	Ao	2	..	38124i	60	1327	30.6	- 5 10	9.1	9.1	Ao	3	0,2	4898m
11	1253	30.4	+37 19	9.8	9.8	Ao	2	..	38124i	61	1325	30.6	- 5 20	9.1	9.1	B8	8	3,5	4898m
12	882	30.4	+24 18	8.2	9.3	K2	1	..	38084i	62	1326	30.6	- 5 29	9.1	9.1	B8	4	R	4898m
13	902	30.4	+21 56	6.74	7.24	F8	4	..	37388i	63	1170	30.6	- 8 20	9.1	9.1	Ao	2	..	10366b
14	891	30.4	+18 32	8.9	8.9	Ao	2	0,2	37602i	64	1159	30.6	-22 42	9.8	10.2	Ko	2	..	41088b
15	1128	30.4	+ 0 26	8.7	8.7	Ao	4	..	37590i	65	2865	30.6	-23 31	8.8	9.1	Ko	4	..	41088b
16	1184	30.4	- 4 29	6.28	6.04	Bo	..	3,8	28,197	66	479	30.6	-61 37	7.3	6.8	B9	7	1,9	20516b
17	1183	30.4	- 4 34	6.54	6.30	Bo	..	3,8	28,197	67	453	30.6	-64 39	9.4	10.8	Ma	1	..	38371b
18	1185	30.4	- 4 54	4.65	4.48	B3	..	1,8 R	28,197	68	379	30.6	-72 49	9.4	9.8	F5	3	..	20540b
19	1316	30.4	- 5 8	9.1	9.1	Ao	3	1,2	4898m	69	326	30.6	-76 16	10.2	10.6	F5	2	..	15162b
20		30.4	- 5 27	6.84						70	1044	30.7	+56 18	6.89	7.31	F5	5	0,5	37407i
21		30.4	- 5 27	7.93						71	1204	30.7	+37 2	7.7	8.3	Go	3	..	38124i
22	1315	30.4	- 5 27	5.36		Oe5	..	0, R	28,197	72	941	30.7	+29 15	8.8	8.9	A3	2	..	37525i
23		30.4	- 5 27	6.85						73	894	30.7	+18 53	8.1	9.1	Ko	5	5,4	37602i
24		30.4	- 5 27	Neb.	Neb.	Pb	..	R	76,22	74	1012	30.7	+ 8 54	8.7	9.3	Go	2	..	38223i
25	1240	30.4	- 6 6	8.2	8.1	B5	7	2,7	4898m	75	964	30.7	- 0 59	9.6	9.6	Ao	3	..	12391b
26		30.4	-67 30	..	..	Oa	..	..	76,28	76	965	30.7	- 1 3	8.5	8.5	B9	6	R	12391b
27	399	30.4	-70 54	8.4	8.4	Ao	3	1,7	9062b	77	1188	30.7	- 4 55	5.28	5.56	Fo	..	0,6	28,198
28	207	30.5	+76 55	8.4	9.2	G5	1	..	37343i	78	1242	30.7	- 6 9	9.1	9.1	Ao	2	..	4898m
29	598	30.5	+63 10	8.6	9.7	K2	2	..	38154i	79	1171	30.7	- 8 43	8.0	8.0	Ao	7	..	12770b
30	1002	30.5	+55 41	8.0	8.4	F5	4	0,3	37366i	80	1205	30.7	-21 8	7.40	8.8	Ko	7	5,4	41088b
31	1204	30.5	+51 2	8.6	8.6	Ao	2	..	37366i	81	1161	30.7	-22 46	10.3	9.8	F5	2	..	41088b
32	1118	30.5	+34 45	8.1	8.0	B5	4	..	38124i	82	479	30.7	-65 32	9.1	9.2	A2	3	..	38371b
33	829	30.5	+12 23	7.7	8.5	G5	6	..	37602i	83	425	30.7	-66 37	8.9	9.2	Fo	3	..	38371b
34	887	30.5	+ 9 39	9.6	9.6	Ao	4	..	39685b	84	400	30.7	-70 20	9.2	10.4	K5	1	..	15167b
35	888	30.5	+ 9 28	8.7	8.7	B9	5	..	39685b	85	928	30.8	+53 30	8.6	8.9	Fo	2	2,2	37366i
36	966	30.5	+ 6 21	9.1	9.9	G5	2	..	39685b	86	1379	30.8	+49 54	8.37	8.45	A3	3	..	37366i
37	1011	30.5	+ 0 2	8.18	8.16	B9	3	..	12391b	87	1253	30.8	+44 31	8.9	9.0	A5	2	..	38940i
38	961	30.5	- 1 54	7.92	8.20	Fo	5	..	12391b	88	958	30.8	+14 35	8.2	8.8	Go	3	..	37602i
39	1145	30.5	- 3 37	10.0	10.6	G	1	..	4898m	89	969	30.8	+ 6 35	8.9	9.2	F2	2	..	39685b
40	1186	30.5	- 4 26	6.29	6.17	B5	..	0,5-	28,197	90	1307	30.8	- 2 26	8.6	9.0	F5	4	0,4	12391b
41	1319	30.5	- 5 29	5.17	4.95	B1	..	..	28,197	91	1244	30.8	- 6 49	9.6	9.6	Ao	2	..	4898m
42	1320	30.5	- 5 29	6.53	6.31	B1	..	R	28,197	92	2499	30.8	-30 47	8.8	9.3	A5	2	..	14690b
43	1241	30.5	- 5 59	2.87	..	Oe5	..	R	28,197	93	480	30.8	-65 12	9.6	10.8	K5	1	..	38371b
44	2526	30.5	-25 37	9.1	9.8	Ko	3	..	41088b	94	283	30.9	+72 15	8.5	8.9	F5	3	..	37343i
45	1953	30.5	-40 50	10.4	10.6	K	1	E	20649b	95	1208	30.9	+50 18	8.6	9.4	G5	2	..	37366i
46	1912	30.5	-47 44	8.5	9.6	G5	2	..	12756b	96	1255	30.9	+37 51	9.4	9.5	A2	1	..	38124i
47	1863	30.5	-48 52	9.5	9.7	G5	2	..	12756b	97	1025	30.9	+31 16	7.8	8.2	F5	3	..	37377i
48	850	30.5	-54 34	8.5	9.2	K2	3	..	20548b	98	870	30.9	+26 52	5.70	5.65	B8	8	..	36997i
49	478	30.5	-61 31	9.0	8.7	A2	5	..	38371b	99	892	30.9	+ 9 41	8.8	9.8	Ko	3	..	39685b
50	1031	30.6	+46 8	8.8	8.8	Ao	3	0,3	38940i	100	942	30.9	+ 7 59	8.8	9.3	F8	3	..	39685b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

37100

5^h 30^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	983	m. 30.9	° + 4 34	7.7	8.0	Fo	5	0,5	37594i	51	1131	m. 31.3	° - 7 28	7.26	7.24	B9	7	0,3	4898m
2	1245	30.9	- 6 5	9.4	9.9	F8	1	3,1	4898m	52	1190	31.3	-13 18	8.0	9.0	Ko	2	..	20485b
3	1130	30.9	- 7 28	9.1	9.9	G5	1	..	4898m	53	1124	31.3	-20 46	9.8	10.0	G5	1	..	41088b
4	1089	30.9	-15 48	6.67	6.62	B8	9	..	20485b	54	901	31.4	+57 4	9.0	9.3	Fo	2	..	37408i
5	2375	30.9	-35 55	7.6	8.3	A5	5	5,4	1469ob	55	929	31.4	+53 49	9.2	9.3	A2	2	..	37366i
6	1783	30.9	-49 27	7.2	7.8	F5	4	3,9	20643b	56	1382	31.4	+50 0	9.42	9.70	F	1	R	37366i
7	454	30.9	-64 10	10.0	10.6	G	1	..	38371b	57	1235	31.4	+38 33	8.5	9.5	Ko	1	..	38124i
8	208	31.0	+76 20	8.7	9.3	Go	1	..	37343i	58	833	31.4	+12 25	8.3	8.4	A2	4	..	37602i
9	830	31.0	+12 2	7.9	8.7	G5	3	..	37602i	59	826	31.4	+10 14	9.3	9.4	A3	1	..	38223i
10	893	31.0	+ 9 34	8.9	8.9	Ao	3	..	38223i	60	898	31.4	+ 9 15	4.39	5.39	Ko	..	R	1617c
11	1016	31.0	- 0 22	9.6	9.6	Ao	2	..	12391b	61	1212	31.4	-12 24	9.0	9.6	Go	1	..	18414b
12	1017	31.0	- 0 51	8.3	8.3	B9	6	..	12391b	62	1126	31.4	-20 0	8.08	9.4	K5	2	..	18522b
13	968	31.0	- 1 49	8.37	8.35	B9	4	..	12391b	63	2410	31.4	-33 39	8.2	9.0	Ko	3	..	1469ob
14	1331	31.0	- 5 26	9.1	9.1	Ao	3	1,3	4898m	64	2012	31.4	-42 9	9.7	10.3	K	1	..	14691b
15	1330	31.0	- 5 41	8.2	8.1	B5	5	4,3	4898m	65	2013	31.4	-42 50	8.9	8.8	Go	5	..	14691b
16	1206	31.0	-21 52	9.4	9.5	F8	3	..	41088b	66	1919	31.4	-47 37	9.1	10.8	K	1	..	12756b
17	2327	31.0	-34 32	8.8	9.1	G5	3	..	1469ob	67	436	31.4	-60 11	7.2	8.1	Ko	7	..	38371b
18	1836	31.0	-50 56	9.3	9.6	F5	2	..	24143b	68	207	31.5	+77 33	8.9	9.4	F8	1	..	37343i
19	1539	31.0	-51 43	7.9	7.6	Fo	7	..	24143b	69	1262	31.5	+37 41	7.7	7.7	B9	7	..	38124i
20	480	31.0	-61 2	8.8	9.1	F5	2	..	38371b	70	876	31.5	+26 10	8.4	8.5	A2	2	..	36997i
21	384	31.0	-69 51	8.7	9.0	F2	4	..	20540b	71	828	31.5	+10 58	6.10	7.10	Ko	5	2,8	38223i
22	401	31.0	-70 3	8.54	9.2	Ko	5	..	20540b	72	973	31.5	- 1 18	9.6	9.6	Ao	2	..	37590i
23	959	31.1	+22 3	9.1	9.1	B8	2	..	37388i	73	1311	31.5	- 2 3	8.6	8.6	B8	7	..	12391b
24	1018	31.1	+20 40	8.6	9.2	Go	3	..	37388i	74	1335	31.5	- 5 28	9.1	9.1	Ao	3	0,3	4898m
25	866	31.1	+15 34	7.6	8.6	Ko	4	..	37602i	75	2573	31.5	-31 29	8.8	9.7	G5	2	..	44364b
26	959	31.1	+14 9	8.3	8.9	Go	2	..	37602i	76	2413	31.5	-33 37	8.8	9.3	Ko	3	..	44364b
27	880	31.1	+11 47	8.1	8.1	B9	5	..	37602i	77	2381	31.5	-35 33	8.7	8.5	Fo	4	2,3	1469ob
28	969	31.1	- 1 16	1.75	1.51	Bo	..	R	28,198	78	1926	31.5	-43 57	9.9	9.9	F8	2	..	14691b
29	1190	31.1	- 4 29	6.98	6.86	B5	3	2,8	37550i	79	483	31.5	-62 45	9.7	9.8	A5	2	..	38371b
30	1189	31.1	- 4 49	10.3	10.3	A	1	..	4898m	80	402	31.5	-70 16	9.3	10.3	Ko	2	..	15167b
31	1247	31.1	- 6 20	8.6	8.6	B9	5	1,5	4898m	81	403	31.5	-70 54	8.8	9.6	G5	2	..	20540b
32	2563	31.1	-31 46	7.28	6.8	B9	7	0,8	9061b	82	204	31.5	-77 48	10.3	10.6	Fo	4	..	15162b
33	2378	31.1	-35 28	9.0	8.8	F5	3	..	1469ob	83	1096	31.6	+51 17	8.5	8.6	A2	4	..	37366i
34	142	31.1	-81 7	7.15	7.5	A2	10	..	20557b	84	1238	31.6	+41 47	6.87	8.05	K5	4	0,3	38124i
35	364	31.2	+70 26	8.8	9.8	Ko	2	..	38112i	85	834	31.6	+12 43	8.9	9.9	Ko	1	..	38223i
36	806	31.2	+61 53	6.65	6.79	A5	8	3,6	38154i	86	949	31.6	+ 7 35	8.9	9.2	F2	2	..	39685b
37	1354	31.2	+42 57	8.5	9.1	Go	2	5,2	38940i	87	974	31.6	- 1 5	8.9	8.9	B9	5	0,4	12391b
38	1102	31.2	+33 30	6.43	7.43	Ko	5	0,5	37377i	88	1336	31.6	- 5 50	9.1	9.2	A2	3	..	4898m
39	968	31.2	+ 5 28	8.9	9.2	F2	4	..	39685b	89	1192	31.6	-13 53	8.6	8.6	Ao	4	..	20485b
40	1018	31.2	- 0 22	9.3	9.3	B9	3	..	12391b	90	1180	31.6	-16 56	8.5	8.5	B9	5	..	20485b
41	1309	31.2	- 2 20	9.0	9.0	Ao	4	..	12391b	91	2430	31.6	-32 58	9.0	9.3	G5	3	..	1469ob
42	1333	31.2	- 5 7	9.10	9.66	Go	2	..	4898m	92	2414	31.6	-33 9	5.74	6.9	Ko	..	5,9	56,121
43	1963	31.2	-40 56	9.6	10.0	Ko	2	..	14691b	93	874	31.6	-56 38	8.7	9.0	Ko	3	..	20548b
44	1540	31.2	-51 8	9.3	9.7	Ko	2	..	24143b	94	437	31.6	-60 48	9.2	9.6	Go	2	E	38371b
45	1381	31.3	+49 21	7.07	7.85	G5	5	..	37366i	95	426	31.6	-66 45	8.6	9.2	Go	3	E	38367b
46	1188	31.3	+35 32	7.32	8.32	Ko	4	..	38124i	96	382	31.6	-72 53	R	9.4	G5	6	E	15162b
47	822	31.3	+16 59	5.39	5.53	A5	..	2,7	56,80	97	209	31.7	+77 3	8.9	9.5	Go	2	2,1	38330i
48	897	31.3	+ 9 49	8.8	9.4	Go	2	..	38223i	98	1383	31.7	+49 44	9.7	9.8	A5	2	..	37366i
49	971	31.3	- 1 41	8.4	8.4	B8	5	..	12391b	99	1150	31.7	+45 23	8.12	8.90	G5	2	..	37391i
50	1334	31.3	- 5 43	6.45	6.28	B3	..	0,5	28,198	100	1355	31.7	+42 20	8.2	8.3	A3	2	..	37391i

THE HENRY DRAPER CATALOGUE.

37200

5^h 31^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1191	31.7	+35 54	8.2	9.2	Ko	2	..	38124i	51	1058	32.1	+32 37	8.0	8.8	G5	3	0,2	37525i
2	908	31.7	+21 5	3.00	2.83	B3p	..	R	56,80	52	1059	32.1	+32 25	7.7	8.3	Go	4	2,3-	37525i
3	986	31.7	+19 43	8.7	8.7	Ao	3	0,2	37388i	53	912	32.1	+21 50	9.4	10.8	Ma	1	..	37388i
4	824	31.7	+16 30	8.8	8.8	B9	3	..	37602i	54	872	32.1	+15 51	8.1	8.5	F5	3	..	37602i
5	868	31.7	+15 50	8.9	8.9	Ao	2	..	37602i	55	902	32.1	+ 9 34	9.6	9.7	A2	3	..	39685b
6	869	31.7	+15 40	8.7	8.8	A2	2	..	37602i	56	1024	32.1	- 0 15	8.8	8.8	Ao	2	..	37590i
7	1153	31.7	- 3 22	9.1	10.1	Ko	2	2,2	4898m	57	1025	32.1	- 0 33	8.9	8.9	Ao	3	..	37590i
8	1338	31.7	- 5 12	9.1	9.2	A2	2	0,2	4898m	58	1257	32.1	- 6 13	9.1	9.1	Ao	1	..	4898m
9	1255	31.7	- 6 8	5.62	5.45	B3	..	0,7	28,198	59	3236	32.1	-24 41	8.6	9.5	Ko	4	..	41088b
10	1254	31.7	- 6 31	8.4	8.4	B9	5	0,6	4898m	60	1790	32.1	-49 1	7.4	7.8	A2	4	2,9	20643b
11	1094	31.7	-15 53	7.9	8.9	Ko	5	..	20485b	61	1545	32.1	-51 42	9.0	9.1	F2	4	..	24143b
12	2539	31.7	-25 48	7.92	9.5	Na	3	..	41088b	62	346	32.1	-70 59	8.3	8.7	F5	7	..	20540b
13	2373	31.7	-27 40	7.9	8.6	G5	3	..	12398b	63	402	32.2	+66 54	9.2	10.2	Ko	2	..	38112i
14	484	31.7	-62 39	10.2	10.8	G	1	..	38371b	64	775	32.2	+62 34	8.1	8.2	A5	4	..	36654i
15	902	31.8	+57 6	9.7	9.7	Ao	2	..	37407i	65	1320	32.2	+43 39	7.9	8.3	F5	2	..	37391i
16	982	31.8	+52 51	8.5	9.3	G5	4	0,3	37407i	66	1271	32.2	+37 55	7.6	7.6	B9	7	..	38124i
17	1123	31.8	+34 7	8.4	8.4	Ao	3	2,3	38921i	67	1270	32.2	+37 41	8.2	8.2	Ao	4	..	38124i
18	884	31.8	+11 43	8.9	8.9	Ao	2	..	38223i	68	1126	32.2	+35 1	8.17	8.31	A5	3	R	38124i
19	1014	31.8	+ 8 10	8.9	9.4	F8	3	..	39685b	69	963	32.2	+30 26	5.49	5.55	A2	7	0,8	36997i
20	1015	31.8	+ 8 8	8.4	9.0	Go	2	..	39685b	70	913	32.2	+21 58	9.8	9.9	A5	2	..	37388i
21	1134	31.8	-18 45	8.6	9.0	F5	3	..	18522b	71	974	32.2	+ 6 4	7.4	7.8	F5	3	..	14071b
22	3232	31.8	-24 3	8.4	9.5	Ko	5	..	41088b	72	979	32.2	- 1 43	8.3	8.3	B9	4	..	37590i
23	2431	31.8	-32 22	9.6	9.9	Ao	1	..	44364b	73	1158	32.2	- 3 54	9.8	9.9	A2	2	..	4898m
24	2419	31.8	-33 20	6.69	7.1	F5	8	..	14690b	74	1209	32.2	-21 26	10.0	10.0	Go	1	..	41088b
25	1967	31.8	-40 39	9.8	9.8	Ko	1	..	14691b	75	2897	32.2	-23 57	11.0	9.7	A2	2	..	41088b
26	854	31.8	-54 58	6.35	7.3	F5	10	..	20548b	76	2513	32.2	-30 36	7.54	8.4	G5	5	..	14690b
27	837	31.8	-57 9	6.76	7.5	Fo	5	0,9	20516b	77	2020	32.2	-42 46	10.1	9.7	Go	2	..	20649b
28	316	31.9	+71 39	8.9	9.0	A5	2	..	37343i	78	744	32.2	-52 42	7.3	8.0	Ko	7	..	24143b
29	930	31.9	+53 28	9.2	9.6	F5	1	..	37366i	79	460	32.2	-63 31	7.3	7.3	Ao	5	..	38371b
30	963	31.9	+22 24	9.0	9.0	Ao	2	..	37388i	80	349	32.2	-71 17	9.4	10.4	Ko	2	..	15167b
31	871	31.9	+15 11	7.69	8.47	G5	6	..	37602i	81	599	32.3	+63 14	7.18	7.96	G5	5	..	36654i
32	1016	31.9	+ 8 53	6.09	5.92	B3	..	2,6	1617c	82	1006	32.3	+55 3	7.86	8.20	F2	5	3,4	37407i
33	951	31.9	+ 7 36	8.3	8.4	A2	2	..	14071i	83	1362	32.3	+42 37	7.44	8.79	Ma	4	..	37391i
34	989	31.9	+ 4 42	7.50	7.48	B9	5	1,4	14071i	84	1027	32.3	- 0 45	9.1	9.1	A	1	..	37590i
35	1023	31.9	- 0 45	8.7	8.7	B9	4	..	37590i	85	980	32.3	- 1 49	9.3	9.3	Ao	1	..	37590i
36	1132	31.9	- 7 9	8.6	9.6	Ko	3	0,2	4898m	86	2298	32.3	-28 46	6.15	6.8	Ao	9	..	14690b
37	1235	31.9	-10 34	8.6	8.7	A2	4	0,4-	10366b	87	1956	32.3	-41 57	9.0	9.7	G5	2	..	14691b
38	1231	31.9	-11 52	8.6	9.1	F8	2	..	18414b	88	206	32.3	-77 27	9.7	10.1	F5	4	..	15162b
39	2432	31.9	-32 28	9.0	9.9	K2	1	..	44364b	89	485	32.4	+65 38	5.78	6.78	Ko	9	..	36654i
40	70	31.9	-85 8	9.3	10.1	G5	1	..	15145b	90	1239	32.4	+38 29	8.4	8.4	B8	3	..	38124i
41	879	32.0	+26 52	9.1	9.7	Go	3	..	37525i	91	898	32.4	+24 57	10.7	12.1	Mc	..	..	M
42	895	32.0	+24 15	9.0	9.0	A	2	..	38084i	92	978	32.4	+23 39	9.5	10.3	G5	1	..	38084i
43	900	32.0	+ 9 13	9.6	10.1	F8	3	..	39685b	93	1020	32.4	+ 2 16	8.9	8.9	Ao	3	0,2	39866b
44	1182	32.0	-16 45	8.6	9.7	K2	2	..	18522b	94	1028	32.4	- 0 18	8.8	8.8	Ao	3	..	37590i
45	2433	32.0	-32 35	9.8	9.7	A2	1	..	44364b	95	1316	32.4	- 2 8	9.1	9.5	F5	2	..	37590i
46	1928	32.0	-47 24	9.9	9.9	G	1	..	12756b	96	2130	32.4	-44 24	9.0	10.8	Ko	1	..	14691b
47	482	32.0	-59 38	8.7	8.8	F2	3	..	20548b	97	456	32.4	-64 18	5.30	6.0	G5	9	..	38371b
48	..	32.0	-71 6	..	..	Oa	..	..	76,28	98	482	32.4	-65 53	10.0	11.4	Ma	2	..	38371b
49	1384	32.1	+49 10	9.7	10.0	Fo	2	..	37366i	99	965	32.5	+14 20	8.7	8.8	A2	2	..	37602i
50	1240	32.1	+41 18	6.56	7.56	Ko	5	..	37391i	100	1019	32.5	+ 8 53	8.3	8.9	Go	2	..	38223i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

37300

5^h 32^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	952	32.5	+ 7 11	8.8	9.2	F5	3	..	39685b	51	483	32.8	-65 5	8.2	8.8	Go	4	..	38371b
2	1029	32.5	- 0 56	9.6	9.6	A	1	..	37590i	52	966	32.9	+30 6	7.76	7.76	Ao	3	..	36997i
3	1262	32.5	- 6 0	5.75	5.53	B1	..	4,6-	28,198	53	969	32.9	+17 42	9.3	9.3	Ao	3	..	37602i
4	1137	32.5	- 7 15	9.8	9.8	A	1	..	4898m	54	843	32.9	+12 37	8.7	8.7	B9	3	..	37602i
5	1178	32.5	- 8 36	8.8	9.4	G	3	R	1277ob	55	1024	32.9	+ 8 26	7.04	7.82	G5	3	..	14071i
6	1238	32.5	-11 50	6.02	6.02	Ao	10	..	20485b	56	1196	32.9	- 4 52	6.32	6.10	B1	..	4,6-	28,198
7	1195	32.5	-13 44	8.6	8.7	A3	2	..	20485b	57	1264	32.9	- 6 46	9.1	9.1	Ao	4	..	4898m
8	1186	32.5	-17 5	8.6	8.6	Ao	3	..	20485b	58	1180	32.9	- 8 16	8.0	8.1	A2	5	2,2	1277ob
9	1223	32.5	-19 42	8.4	9.4	K5	1	..	18522b	59	1240	32.9	-10 27	8.0	9.0	Ko	2	5,2	10366b
10	2544	32.5	-25 13	9.6	10.4	K5	2	..	41088b	60	1185	32.9	-16 45	8.6	9.8	K5	2	..	18522b
11	2545	32.5	-25 53	8.1	9.2	Ko	5	..	41088b	61	1169	32.9	-22 56	9.1	9.7	F5	2	..	41088b
12	2065	32.5	-39 22	9.4	9.7	F5	3	E	20649b	62	1979	32.9	-40 46	9.4	9.7	A	2	..	14691b
13	1935	32.5	-43 28	8.9	8.5	Ao	7	..	14691b	63	458	32.9	-64 29	9.0	9.1	A2	3	..	38371b
14	1931	32.5	-47 1	8.7	9.7	G5	3	..	12756b	64	457	32.9	-64 44	10.4	11.4	K	1	..	38371b
15	894	32.6	+60 34	6.98	7.06	A3	6	2,6	37407i	65	1373	33.0	+39 50	8.27	8.33	A2	2	..	37391i
16	1241	32.6	+38 27	8.0	8.0	B9	5	..	38124i	66	968	33.0	+30 50	7.52	7.40	B5	4	..	37377i
17	1195	32.6	+35 35	8.1	8.1	Ao	4	..	38124i	67	947	33.0	+29 10	6.00	5.88	B5	6	2,7	36997i
18	836	32.6	+28 24	8.2	8.0	B	3	R	37525i	68	995	33.0	+ 4 53	7.85	7.91	A2	4	3,4	37594i
19	906	32.6	+ 9 27	8.9	9.0	A3	2	..	38223i	69	1076	33.0	+ 1 56	7.7	8.5	G5	2	..	14071b
20	953	32.6	+ 7 29	5.70	5.65	B8	8	..	14071i	70	1034	33.0	- 0 14	7.9	7.9	B9	5	..	37590i
21	982	32.6	- 1 30	9.1	9.1	B8	4	..	37550i	71	1035	33.0	- 0 14	9.1	9.1	B9	3	..	37590i
22	1159	32.6	- 3 43	10.3	10.3	Ao	2	..	4898m	72	1265	33.0	- 6 32	9.4	9.4	Ao	2	..	4898m
23	1240	32.6	-11 28	9.1	9.1	Ao	3	..	18414b	73	1267	33.0	- 6 47	9.0	9.0	B9	5	0,5	4898m
24	1224	32.6	-19 55	8.33	8.8	A3	3	..	41088b	74	1217	33.0	-12 45	8.6	8.7	A3	4	..	20485b
25	1132	32.6	-19 59	8.58	8.5	Ao	5	..	18522b	75	1170	33.0	-22 54	8.6	9.4	G5	4	..	41088b
26	3244	32.6	-24 5	9.1	9.0	A2	4	..	41088b	76	2350	33.0	-34 47	7.74	8.8	Ko	5	..	14690b
27	3245	32.6	-24 47	8.0	8.6	B9	7	1,4	41088b	77	2394	33.0	-35 7	6.81	8.6	Ko	7	..	14690b
28	983	32.7	+52 30	7.22	8.00	G5	5	5,4	37407i	78	1981	33.0	-40 45	10.4	9.8	A	2	..	14691b
29	884	32.7	+26 34	6.47	7.47	Ko	4	0,4	37377i	79	431	33.0	-66 1	8.3	8.8	F8	6	..	38371b
30	1138	32.7	+ 0 55	7.24	7.22	B9	6	..	37590i	80	184	33.0	-79 50	8.8	9.4	Go	6	0,4	15162b
31	1139	32.7	+ 0 15	8.7	8.8	A2	4	..	37590i	81	233	33.1	+75 28	8.72	9.22	F8	2	..	37343i
32	1031	32.7	- 0 50	8.9	8.9	B8	5	..	37590i	82	903	33.1	+59 59	8.86	9.14	F	2	..	37407i
33	1319	32.7	- 2 30	8.6	8.6	Ao	2	..	37590i	83	1326	33.1	+43 40	8.4	8.5	A3	2	..	37391i
34	1342	32.7	- 5 0	7.30	7.13	B3	..	2,7-	28,198	84	1277	33.1	+37 55	7.33	7.31	B9	7	..	38124i
35	2518	32.7	-30 14	9.1	9.4	Go	2	..	14690b	85	1196	33.1	+35 36	7.8	8.8	Ko	2	..	38124i
36	440	32.7	-60 1	9.18	9.6	Ko	1	..	38371b	86	949	33.1	+29 47	8.4	9.2	G5	2	..	37525i
37	486	32.8	+65 4	8.80	9.80	Ko	3	..	38154i	87	982	33.1	+23 16	7.8	9.0	K5	2	..	38084i
38	1325	32.8	+43 16	7.14	8.32	K5	4	..	37391i	88	981	33.1	+23 14	8.6	9.1	F8	2	..	38084i
39	1275	32.8	+37 56	6.89	6.87	B9	8	..	38124i	89	985	33.1	- 1 48	8.62	8.62	Ao	2	..	37590i
40	907	32.8	+ 9 50	8.9	8.9	Ao	3	..	38223i	90	1268	33.1	- 6 18	10.3	10.3	Ao	2	..	10366b
41	973	32.8	+ 5 57	7.53	8.71	K5	2	..	14071i	91	3251	33.1	-24 28	7.9	8.3	F2	4	..	18557b
42	1140	32.8	+ 0 56	7.89	7.87	B9	3	..	37590i	92	1803	33.1	-49 49	8.3	9.4	G5	3	..	12756b
43	1033	32.8	- 0 14	9.3	9.3	Ao	2	..	37590i	93	257	33.2	+74 34	7.27	7.83	Go	6	5,5	37558i
44	984	32.8	- 1 38	8.7	8.8	A2	1	..	37590i	94	934	33.2	+53 26	6.41	7.41	Ko	6	0,5 R	37407i
45	1225	32.8	-18 58	8.0	9.1	K2	3	..	18522b	95	985	33.2	+52 8	8.0	8.3	Fo	3	5,3	37366i
46	2908	32.8	-23 55	9.1	8.5	Fo	3	..	18557b	96	1025	33.2	+ 8 58	9.1	9.1	Ao	2	..	38223i
47	2442	32.8	-32 44	9.3	9.9	G5	2	..	44364b	97	987	33.2	- 1 13	6.74	6.57	B3	5	0,7	37550i
48	2113	32.8	-38 41	8.5	9.2	F5	2	..	46181b	98	1161	33.2	- 3 24	10.0	10.6	G	1	R	4898m
49	835	32.8	-55 19	8.6	9.8	K5	1	..	20548b	99	1269	33.2	- 6 28	8.6	9.0	F5	4	0,4	4898m
50	487	32.8	-62 33	3.81	4.23	F5p	..	R	28,198	100	1885	33.2	-48 25	9.9	9.6	A	2	..	12756b

THE HENRY DRAPER CATALOGUE.

37400

5^h 33^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	878	33.2	-56 4	8.9	9.5	F2	3	..	20548b	51	1296	33.6	+49 0	9.2	9.6	F5	2	..	37366i
2	441	33.2	-60 10	8.2	8.1	F8	5	..	38371b	52	1134	33.6	+34 12	8.4	9.6	K5	1	..	37377i
3	463	33.2	-63 37	8.4	9.5	K2	3	..	38371b	53	970	33.6	+30 2	8.16	8.58	F5	4	3,2-	37525i
4	1156	33.3	+45 39	7.9	8.0	A3	3	..	37391i	54	960	33.6	+7 30	8.8	9.4	Go	2	..	38223i
5	1197	33.3	+35 57	7.74	7.74	A0	5	..	38124i	55	1348	33.6	-5 10	9.1	9.1	A	2	..	4898m
6	998	33.3	+19 43	7.9	8.9	K0	2	0,2	37602i	56	1222	33.6	-12 30	8.6	9.1	F8	2	..	12770b
7	848	33.3	+12 54	8.5	9.3	G5	2	..	37602i	57	1213	33.6	-21 41	9.1	9.7	F8	3	..	41088b
8	956	33.3	+7 59	8.3	8.4	A2	5	..	39685b	58	3259	33.6	-24 11	7.9	8.9	F2	3	..	18557b
9	1162	33.3	-3 37	9.1	10.2	K2	2	..	4898m	59	2391	33.6	-27 39	8.6	8.9	F5	2	..	18557b
10	1198	33.3	-4 9	6.76	6.82	A2	6	0,9	37550i	60	2305	33.6	-37 16	8.8	9.7	K5	1	..	46181b
11	1346	33.3	-5 29	9.1	9.1	A0	2	..	4898m	61	1943	33.6	-47 54	9.3	9.3	F8	2	..	12756b
12	1270	33.3	-6 29	9.8	9.8	A0	2	..	4898m	62	526	33.6	-58 56	6.49	7.8	K2	6	..	20548b
13	1139	33.3	-7 48	9.1	9.1	A	1	E	4898m	63	181	33.7	+80 34	7.90	7.96	A2	7	2,4	37558i
14	2440	33.3	-33 54	8.7	9.3	K2	3	..	14690b	64	402	33.7	+68 27	8.4	9.0	Go	3	..	38112i
15	1807	33.3	-49 46	9.0	9.7	G	1	..	12756b	65	406	33.7	+66 35	7.8	8.8	K0	5	..	36654i
16	1552	33.3	-51 48	9.2	9.9	K2	1	..	24143b	66	909	33.7	+24 10	7.04	7.38	F2	6	..	38084i
17	746	33.3	-52 55	9.7	9.7	A	1	R	24143b	67	1028	33.7	+2 48	8.2	8.2	B9	4	..	14071i
18	857	33.3	-54 18	8.7	9.5	F5	2	..	20548b	68	1326	33.7	-2 39	3.78	3.54	Bo	..	R	6210c
19	405	33.4	+66 28	8.8	8.9	A2	3	2,2	36654i	69	1200	33.7	-4 44	9.6	9.6	A0	2	..	4898m
20	813	33.4	+61 35	7.9	8.3	F5	3	0,3	37407i	70	1274	33.7	-6 13	9.0	9.0	B9	6	0,5	4898m
21	1295	33.4	+48 58	9.2	9.3	A3	2	..	37366i	71	1191	33.7	-14 24	8.0	8.3	F0	4	..	20485b
22	1132	33.4	+34 14	8.0	9.0	K0	2	..	37377i	72	2343	33.7	-26 47	7.50	8.0	F0	6	..	18557b
23	1040	33.4	+31 10	8.1	8.6	F8	2	0,2	37377i	73	2605	33.7	-31 7	7.28	8.7	G5	6	..	14690b
24	828	33.4	+27 44	9.0	9.0	B9	2	..	37525i	74	2346	33.7	-36 57	9.0	9.1	A0	3	5,3	12665b
25	850	33.4	+12 15	8.7	9.1	F5	1	..	38223i	75	1135	33.8	+34 30	8.1	9.1	K0	2	..	38124i
26	909	33.4	+9 24	8.9	9.0	A3	2	..	38223i	76	988	33.8	+23 38	8.6	8.6	A0	1	..	38084i
27	1036	33.4	-0 12	8.9	8.9	B9	2	..	37590i	77	896	33.8	+11 47	8.4	8.9	F8	2	..	38223i
28	1271	33.4	-6 12	8.6	8.6	A0	4	0,4	4898m	78	838	33.8	+10 13	8.42	8.92	F8	2	..	38223i
29	1171	33.4	-22 48	8.6	9.7	K0	3	..	41088b	79	1327	33.8	-2 39	6.50	6.33	B3	..	..	18240c
30	2389	33.4	-27 56	5.95	7.0	A5	..	5,8R	56,121	80	1201	33.8	-4 20	9.1	9.1	A0	4	0,3	12754b
31	2442	33.4	-33 53	8.7	9.0	K0	3	..	14690b	81	1275	33.8	-6 38	5.92	5.75	B3	..	0,6-	56,81
32	1982	33.4	-40 20	10.7	10.3	G	2	E	20649b	82	1141	33.8	-7 27	8.6	9.2	Go	2	..	4898m
33	2137	33.4	-44 6	7.6	9.1	K0	5	..	14691b	83	2319	33.8	-28 5	9.0	9.2	F2	2	..	12398b
34	1940	33.4	-47 22	6.04	7.1	K0	8	..	12756b	84	2317	33.8	-28 41	7.18	7.9	F5	6	..	14690b
35	1035	33.5	+46 3	8.8	9.3	F8	2	..	38940i	85	541	33.9	+65 1	9.05	9.05	A0	2	..	38154i
36	1377	33.5	+39 47	7.82	8.10	F0	3	..	37391i	86	1117	33.9	+33 28	8.7	8.7	A0	2	..	38124i
37	1043	33.5	+31 51	8.0	8.0	B9	4	..	37377i	87	899	33.9	+11 58	7.9	8.2	F0	6	..	37602i
38	902	33.5	+25 50	5.00	4.83	B3	..	2,9	56,81	88	898	33.9	+11 28	7.7	9.1	Ma	1	..	38223i
39	918	33.5	+21 42	6.32	6.38	A2	..	0,6	56,81	89	1029	33.9	+8 9	9.3	9.3	A0	2	..	38223i
40	971	33.5	+17 40	8.9	9.2	F2	2	..	37602i	90	1002	33.9	+4 4	4.54	4.37	B3p	..	R	56,81
41	973	33.5	+14 30	7.3	7.3	A0	7	..	37602i	91	990	33.9	-1 13	7.91	8.91	K0	4	0,3	12754b
42	910	33.5	+9 50	8.9	8.9	A0	2	..	38223i	92	1183	33.9	-8 31	6.76	6.74	B9	4	0,8	37550i
43	988	33.5	-1 6	8.4	9.0	Go	3	..	37590i	93	1138	33.9	-20 41	8.2	8.8	K0	3	E	18522b
44	1347	33.5	-5 6	7.60	7.66	A2	5	0,2	4898m	94	1214	33.9	-21 22	9.6	10.3	K0	2	..	41088b
45	1190	33.5	-14 49	8.16	8.94	G5	2	5,1	20485b	95	2321	33.9	-28 45	5.32	6.1	F2	..	R	56,121
46	1172	33.5	-22 24	9.8	10.6	K0	2	..	41088b	96	2124	33.9	-38 5	6.96	8.1	K0	6	..	12665b
47	1923	33.5	-46 5	8.4	9.0	F5	4	..	12756b	97	2123	33.9	-38 39	8.7	9.2	F8	1	..	46181b
48	442	33.5	-60 51	9.1	9.9	K2	1	..	38371b	98	1987	33.9	-40 11	9.6	10.1	G5	2	..	20649b
49	401	33.6	+68 49	8.5	8.9	F5	4	..	38112i	99	897	33.9	-53 4	9.0	9.6	K0	2	..	24143b
50	815	33.6	+61 14	8.9	9.9	K0	3	..	38154i	100	847	33.9	-57 12	8.9	9.2	F8	3	..	20548b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

37500

5^h 33^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	488	33.9	-61 14	6.36	7.0	Ko	6	R	20516b	51	2037	34.2	-42 46	9.3	9.7	F5	2	..	14691b
2	407	33.9	-70 45	9.1	9.5	F5	2	..	15167b	52	388	34.2	-68 0	8.7	9.2	F8	3	E	38367b
3	542	34.0	+64 41	8.42	8.70	Fo	2	..	36654i	53	396	34.3	+67 55	8.6	8.9	Fo	3	..	36654i
4	1008	34.0	+55 22	9.2	10.0	G5	2	..	37366i	54	397	34.3	+67 15	8.6	8.9	Fo	2	..	36654i
5	1282	34.0	+37 17	7.8	7.8	Ao	3	..	38124i	55	928	34.3	+54 46	8.6	9.0	F5	3	0,2	37407i
6	991	34.0	-1 18	8.9	9.2	F2	3	..	12754b	56	986	34.3	+52 37	8.5	9.1	Go	3	5,2	37407i
7	1142	34.0	-7 16	4.88	4.96	A3	..	1,9 R	56,81	57	846	34.3	+28 56	7.16	8.16	Ko	3	..	37377i
8	1139	34.0	-20 14	8.6	8.8	Fo	4	..	41088b	58	923	34.3	+21 14	8.8	9.1	F	2	..	38084i
9	2564	34.0	-25 0	9.45	9.5	Go	3	..	41088b	59	1004	34.3	+19 38	7.55	7.53	B9	5	1,4	37602i
10	2383	34.0	-29 0	7.38	8.8	Ko	4	..	14690b	60	852	34.3	+12 58	7.22	7.22	Ao	7	..	37602i
11	1891	34.0	-48 21	7.6	7.6	F5	7	..	12756b	61	840	34.3	+10 17	8.5	8.9	F5	2	..	38223i
12	444	34.0	-60 57	8.5	9.3	K5	3	..	38371b	62	966	34.3	+7 16	8.9	8.9	Ao	1	..	38223i
13	329	34.0	-76 19	9.2	9.7	F8	6	..	15162b	63	982	34.3	+5 46	8.2	9.4	K5	1	..	38412b
14	1297	34.1	+48 24	7.74	7.80	A2	4	0,3	37366i	64	1330	34.3	-2 35	9.1	9.1	Ao	4	..	12754b
15	1369	34.1	+40 50	7.68	7.76	A3	3	..	37391i	65	1203	34.3	-4 44	9.0	10.2	K5	3	5,3	12754b
16	1379	34.1	+39 35	7.82	8.10	Fo	2	..	37391i	66	1279	34.3	-6 9	9.4	10.2	G5	2	..	4898m
17	1247	34.1	+39 0	8.5	9.3	G5	1	..	38124i	67	1225	34.3	-12 49	9.1	9.1	Ao	2	..	12770b
18	1248	34.1	+38 28	7.7	8.7	Ko	2	..	38124i	68	1203	34.3	-13 36	8.0	8.1	A2	4	..	20485b
19	1048	34.1	+31 18	5.96	5.91	B8	7	1,7	37377i	69	1197	34.3	-17 7	8.0	8.0	B9	6	..	20485b
20	907	34.1	+25 2	8.86	8.86	A	..	R	38084i	70	3268	34.3	-24 9	9.8	9.3	A2	3	..	41088b
21	978	34.1	+14 44	8.3	9.5	K5	1	..	37602i	71	2077	34.3	-39 33	9.6	8.8	A3	3	..	14691b
22	915	34.1	+9 48	7.36	8.36	Ko	4	..	38223i	72	1894	34.3	-48 1	8.3	8.5	G5	5	..	12756b
23	914	34.1	+9 2	8.9	9.7	G5	2	..	39685b	73	1560	34.3	-51 50	8.5	8.8	F2	6	..	24143b
24	1329	34.1	-2 3	9.1	9.1	B9	4	..	12754b	74	1064	34.4	+32 51	6.80	7.30	F8	6	..	37377i
25	1328	34.1	-2 42	8.4	8.4	B8	6	..	12754b	75	833	34.4	+27 44	8.2	8.6	F5	5	..	37525i
26	1351	34.1	-5 15	7.40	7.35	B8	6	0,4	4898m	76	975	34.4	+17 19	9.6	9.6	A	2	..	37602i
27	1277	34.1	-6 33	8.5	8.6	A2	5	2,4	18394b	77	994	34.4	-1 38	9.3	9.3	B9	3	..	12754b
28	1200	34.1	-13 0	8.0	8.1	A2	5	..	20485b	78	1204	34.4	-4 49	8.50	9.50	Ko	2	0,2	4898m
29	1216	34.1	-21 18	9.1	10.2	K2	3	..	41088b	79	1141	34.4	-20 10	8.4	8.3	Ao	5	E	18522b
30	2395	34.1	-27 16	6.75	8.6	K2	4	..	18557b	80	1218	34.4	-21 19	10.0	10.2	K	1	..	41088b
31	2537	34.1	-30 34	8.0	9.3	Ko	3	..	14690b	81	R	34.4	-22 59	10.5	10.0	F5	2	..	41088b
32	1990	34.1	-40 38	10.9	10.6	F	2	E	20649b	82	2078	34.4	-39 55	10.2	9.4	F8	4	..	20649b
33	1811	34.1	-49 39	9.3	9.7	G5	1	..	12756b	83	839	34.4	-55 28	9.1	9.5	F5	2	..	20548b
34	319	34.2	+71 53	8.0	8.3	Fo	4	..	37343i	84	386	34.4	-72 54	8.8	8.9	A3	6	..	20540b
35	938	34.2	+53 27	9.4	10.0	G	2	..	37366i	85	897	34.5	+60 58	7.8	8.2	F5	3	0,3	37407i
36	1049	34.2	+31 52	6.72	8.07	Ma	3	5,3	37377i	86	905	34.5	+59 40	9.2	9.6	F5	2	..	37407i
37	832	34.2	+27 24	8.5	8.5	A	4	..	37525i	87	1249	34.5	+38 51	8.0	8.0	Ao	3	..	38124i
38	911	34.2	+24 55	9.16	9.44	F	..	R	38084i	88	835	34.5	+16 22	7.5	7.9	F5	5	..	37602i
39	913	34.2	+24 29	7.14	8.14	Ko	4	..	38084i	89	901	34.5	+11 7	8.7	8.7	Ao	3	..	38223i
40	922	34.2	+21 17	9.0	9.1	A5	2	..	38084i	90	967	34.5	+7 37	9.6	9.7	A3	3	..	39685b
41	974	34.2	+17 38	8.5	8.5	B9	4	..	37602i	91	1003	34.5	+4 23	7.9	7.9	B9	3	..	14071b
42	1031	34.2	+8 27	8.3	9.3	Ko	3	..	38223i	92	1146	34.5	+0 52	8.44	8.44	Ao	5	..	12754b
43	986	34.2	+6 51	8.3	8.4	A5	5	..	39685b	93	1145	34.5	+0 45	7.5	8.5	Ko	5	..	12754b
44	997	34.2	+3 22	8.9	9.4	F8	2	..	39866b	94	1166	34.5	-3 37	5.97	6.11	A5	8	5,10	37550i
45	1165	34.2	-3 0	9.6	9.6	B9	3	1,2	12754b	95	2938	34.5	-23 51	9.4	10.2	Ko	2	..	41088b
46	1353	34.2	-5 57	8.4	8.8	F5	5	0,3	4898m	96	1992	34.5	-40 43	9.0	9.7	F5	4	5,2	20649b
47	1278	34.2	-6 8	9.1	9.1	Ao	4	0,3	4898m	97	2145	34.5	-44 40	9.3	10.5	K2	1	..	20649b
48	1196	34.2	-16 58	7.45	8.01	Go	5	..	20485b	98	154	34.5	-80 55	9.6	10.6	Ko	1	..	20557b
49	2358	34.2	-34 45	6.61	7.9	Ko	7	..	14690b	99	81	34.6	+85 16	7.61	8.39	G5	3	..	37546i
50	2413	34.2	-35 2	10.0	9.7	G5	2	R	14690b	100	779	34.6	+62 19	8.0	8.4	F5	4	..	36654i

THE HENRY DRAPER CATALOGUE.

37600

5^h 34^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1050	34.6 ^{m.}	+56 33	6.19	7.19	Ko	6	0,6	37407i	51	990	35.0 ^o	+ 6 38	8.1	9.1	Ko	2	5,2	38412b
2	910	34.6	+25 13	8.6	9.6	Ko	2	..	38084i	52	1044	35.0	- 0 45	8.3	8.7	F5	6	..	12754b
3	887	34.6	+15 18	6.66	6.94	Fo	8	..	37602i	53	1231	35.0	-19 50	8.18	8.6	Ko	3	..	17395b
4	902	34.6	+11 23	8.5	8.5	Ao	2	..	38223i	54	1981	35.0	-41 43	8.7	9.4	Ko	2	..	14691b
5	985	34.6	+ 6 1	8.3	9.3	Ko	1	..	38223i	55	1954	35.0	-43 2	7.4	7.8	Go	7	..	14691b
6	1088	34.6	+ 1 27	7.5	7.5	B9	6	..	14071b	56	494	35.0	-62 52	9.4	10.6	K5	2	..	38371b
7	995	34.6	- 1 25	9.9	9.9	Ao	3	..	12754b	57	1376	35.1	+43 0	6.99	6.82	B3	5	..	37391i
8	2080	34.6	-39 52	8.35	8.8	Go	4	..	14691b	58	928	35.1	+21 17	8.8	9.8	Ko	2	..	38084i
9	1994	34.6	-40 27	10.9	10.1	G	2	E	20649b	59	1150	35.1	+ 0 56	8.79	8.79	Ao	4	..	12754b
10	1979	34.6	-41 13	7.6	8.1	Go	6	..	14691b	60	999	35.1	- 1 29	8.2	8.3	A2	7	..	12754b
11	748	34.6	-52 51	8.6	8.7	Ao	5	..	24143b	61	1000	35.1	- 1 44	8.7	9.3	G	2	..	12754b
12	404	34.7	+68 49	8.6	9.2	Go	2	..	38112i	62	998	35.1	- 1 46	9.1	9.1	Ao	5	..	12754b
13	906	34.7	+59 52	8.01	8.43	F5	5	..	37407i	63	1281	35.1	- 6 50	9.1	9.1	Ao	4	0,3	18394b
14	1250	34.7	+38 8	8.0	8.0	A	5	R	38124i	64	1110	35.1	-15 55	7.33	8.33	Ko	5	..	20485b
15	1229	34.7	+38 8	8.0	8.0	G	5	R	38124i	65	3281	35.1	-24 56	7.85	8.9	K2	3	2,3	12398b
16	1229	34.7	+36 24	8.8	8.9	A2	2	..	38124i	66	1984	35.1	-41 16	10.2	9.9	K	1	E	20649b
17	1120	34.7	+33 52	7.9	8.9	Ko	4	..	37377i	67	1983	35.1	-41 27	9.4	10.0	F5	2	E	20649b
18	1066	34.7	+32 51	8.8	8.8	Ao	2	..	37377i	68	391	35.1	-68 16	8.3	9.3	Ko	5	..	38367b
19	976	34.7	+17 23	9.6	10.6	K	1	..	37602i	69	344	35.2	+69 41	8.8	9.6	G5	1	..	38112i
20	841	34.7	+10 12	8.12	8.40	Fo	4	..	38223i	70	1207	35.2	+35 35	6.74	6.74	Ao	8	..	38124i
21	920	34.7	+ 9 25	8.57	8.57	Ao	4	1,3	39685b	71	1142	35.2	+34 52	8.5	9.5	Ko	2	..	38124i
22	1251	34.7	-11 15	8.0	7.8	B3	4	..	20485b	72	1141	35.2	+34 8	9.5	9.5	A	1	..	38124i
23	1194	34.7	-16 8	8.4	9.5	K2	1	..	18522b	73	911	35.2	+18 36	8.3	8.3	Ao	3	0,2	38084i
24	1198	34.7	-17 53	8.4	8.7	Fo	3	..	18522b	74	1001	35.2	- 1 30	8.4	8.4	B8	6	..	12754b
25	1219	34.7	-21 14	9.6	10.0	F8	2	..	41088b	75	1986	35.2	-41 3	10.9	9.5	F5	2	E	20649b
26	1180	34.7	-22 22	9.8	10.0	A2	2	..	41088b	76	2152	35.2	-44 9	9.2	9.3	Fo	4	..	14691b
27	2329	34.7	-28 53	8.0	7.9	Fo	5	..	14690b	77	1817	35.2	-49 38	9.0	9.4	F5	2	..	12756b
28	1858	34.7	-50 28	7.8	9.0	Ko	4	..	12756b	78	901	35.2	-53 45	8.4	9.3	K5	3	0,2	24143b
29	851	34.7	-57 31	7.52	8.9	Ma	5	..	20548b	79	886	35.2	-56 15	8.7	9.3	K5	3	..	20548b
30	493	34.7	-62 7	7.9	8.7	G5	4	..	38371b	80	..	35.2	-69 49	..	..	Oa	..	..	76,28
31	1009	34.8	+19 5	8.7	8.8	A2	2	..	38084i	81	1009	35.3	+55 16	7.46	8.24	G5	5	5,4	37407i
32	986	34.8	+ 5 37	7.9	9.0	K2	3	..	39685b	82	1392	35.3	+49 48	9.7	9.8	A3	2	..	37366i
33	1332	34.8	- 2 44	9.4	9.4	B9	5	..	12754b	83	849	35.3	+28 25	8.0	8.1	A2	4	0,3	36997i
34	1355	34.8	- 5 7	8.85	9.63	G5	3	0,2	4898m	84	1014	35.3	+20 1	8.25	9.43	K5	1	..	38084i
35	1197	34.8	- 9 46	6.36	6.24	B5	5	3,9	37550i	85	921	35.3	+ 9 12	7.7	8.3	Go	3	..	38223i
36	1951	34.8	-47 16	8.4	8.7	Ko	5	..	12756b	86	1335	35.3	- 2 33	9.1	9.1	B9	3	..	12754b
37	749	34.8	-52 0	8.5	9.0	F2	4	..	24143b	87	1168	35.3	- 3 29	7.8	7.8	B8	4	1,8	37550i
38	816	34.9	+61 26	6.39	7.17	G5	6	5,4	36654i	88	2579	35.3	-25 18	7.5	8.6	F5	4	..	18557b
39	1056	34.9	+31 8	8.1	8.1	Ao	4	..	37377i	89	2578	35.3	-25 36	8.1	8.9	F2	3	..	18557b
40	902	34.9	+27 0	8.7	8.7	Ao	3	..	37377i	90	2051	35.3	-42 40	10.6	10.1	G5	1	..	20649b
41	997	34.9	- 1 59	7.52	7.50	B9	8	R	12754b	91	1957	35.3	-43 30	8.9	10.2	K2	2	..	14691b
42	1167	34.9	- 3 24	8.0	8.0	B9	6	..	4898m	92	459	35.3	-63 59	9.9	10.3	F5	3	..	38371b
43	1199	34.9	-17 54	6.22	6.20	B9	6	..	44350b	93	989	35.4	+52 25	7.00	7.56	Go	5	0,4	37407i
44	192	35.0	+81 45	8.6	8.6	Ao	3	..	37558i	94	1268	35.4	+44 35	8.5	9.0	F8	2	..	38940i
45	..	35.0	+38 53	var.	var.	Md	..	R	M	95	1387	35.4	+39 45	8.6	9.0	F5	2	..	37391i
46	953	35.0	+29 26	6.75	6.75	A	8	R	37525i	96	903	35.4	+26 34	8.0	8.0	B9	3	..	38084i
47	954	35.0	+29 27	7.45	7.45	A	8	R	37525i	97	906	35.4	+11 29	8.7	8.8	A2	2	..	38223i
48	918	35.0	+24 18	8.2	8.7	F8	4	..	38084i	98	1007	35.4	+ 5 2	7.16	7.94	G5	3	..	14071i
49	978	35.0	+17 17	8.4	9.2	G5	3	..	37602i	99	1336	35.4	- 2 30	9.1	9.0	B5	7	..	12754b
50	977	35.0	+17 9	8.7	8.7	A	3	R	37602i	100	1210	35.4	- 4 28	8.2	8.2	B8	5	1,2	4898m

ANNALS OF HARVARD COLLEGE OBSERVATORY.

37700

5^h 35^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1209	35.4	-13 55	8.8	9.4	Go	1	..	18414b	51	906	35.8	+26 14	8.7	8.7	Ao	3	E	38084i
2	1147	35.4	-20 30	6.54	6.6	B8	6	1,7	44350b	52	1007	35.8	+23 16	6.49	6.47	B9	8	..	38084i
3	1221	35.4	-21 40	9.1	10.0	Go	3	..	41088b	53	991	35.8	+22 38	8.8	8.8	Ao	2	..	38084i
4	3287	35.4	-24 23	9.6	9.2	F8	2	..	18557b	54	954	35.8	+13 6	8.8	8.8	A	2	..	37602i
5	2395	35.4	-29 46	8.04	8.8	F5	4	..	14690b	55	922	35.8	+9 30	9.1	10.1	Ko	3	..	39685b
6	1936	35.4	-46 9	7.6	8.4	Go	7	..	12756b	56	1004	35.8	-1 11	5.00	4.83	B3	..	0,8	28,198
7	931	35.5	+54 24	9.4	10.8	Ma	..	..	M	57	1255	35.8	-10 29	8.6	8.6	B9	4	1,3	12770b
8	1258	35.5	+38 9	7.7	7.7	Ao	6	..	38124i	58	1199	35.8	-16 29	8.6	9.1	F8	3	..	18522b
9	918	35.5	+25 28	8.5	8.5	A	4	..	38084i	59	1206	35.8	-17 9	8.4	8.4	Ao	4	0,4	18522b
10	979	35.5	+17 29	7.7	9.1	Ma	4	..	37602i	60	2476	35.8	-32 8	8.8	9.3	A5	3	..	14690b
11	841	35.5	+16 29	4.87	4.70	B3	..	0,10	56,81	61	867	35.8	-54 37	8.0	8.6	G5	5	..	20548b
12	2962	35.5	-23 55	9.8	9.7	Ko	2	..	41088b	62	412	35.8	-70 14	9.1	10.1	Ko	4	..	20540b
13	2581	35.5	-25 12	8.4	8.4	B9	5	..	18557b	63	333	35.8	-76 25	5.06	7.3	Ko	..	R	28,198
14	2549	35.5	-30 22	8.8	9.3	Fo	3	..	14690b	64	368	35.9	+70 47	8.0	8.1	A2	3	..	37343i
15	2435	35.5	-35 14	9.4	9.2	Ao	2	..	14690b	65	488	35.9	+65 54	9.2	9.3	A3	3	..	38112i
16	2322	35.5	-37 49	8.4	9.5	K2	1	..	12665b	66	1261	35.9	+38 9	7.20	8.20	Ko	6	..	38124i
17	1999	35.5	-40 46	5.81	6.3	B8	7	..	42844b	67	1236	35.9	+36 6	8.4	8.3	B5	2	..	38124i
18	1987	35.5	-41 21	7.6	7.7	F5	7	..	14691b	68	920	35.9	+24 16	7.8	7.8	Ao	5	..	38084i
19	1957	35.5	-47 46	7.9	8.5	Ko	5	..	12756b	69	993	35.9	+22 30	8.2	9.2	Ko	2	..	38084i
20	903	35.5	-53 35	7.3	7.5	A2	8	0,9	24143b	70	1024	35.9	+19 24	8.3	8.3	A	3	..	38084i
21	495	35.5	-62 22	9.1	10.1	Ko	1	..	38371b	71	1023	35.9	+19 19	7.7	7.7	Ao	6	..	37602i
22	396	35.5	-69 32	8.8	8.8	Ao	5	..	20540b	72	842	35.9	+16 11	8.3	8.3	Ao	6	..	37602i
23	1218	35.6	+50 39	7.32	8.32	Ko	4	..	37366i	73	896	35.9	+15 10	7.69	8.25	Go	5	..	37602i
24	1057a	35.6	+31 59	var.	var.	Md	..	R	M	74	955	35.9	+13 53	8.9	9.3	F5	2	..	37602i
25	958	35.6	+29 15	8.8	8.9	A3	4	2,3	37525i	75	1009	35.9	+4 12	8.4	8.8	F5	3	..	39866b
26	1222	35.6	-21 20	10.3	10.0	Go	3	..	41088b	76	1005	35.9	-1 32	8.2	8.1	B5	4	..	37550i
27	1223	35.6	-21 5	9.1	9.7	G5	4	..	41088b	77	1170	35.9	-3 54	7.50	8.57	K2	5	2,2	4898m
28	1184	35.6	-22 53	9.1	10.0	K2	2	..	41088b	78	2969	35.9	-23 46	7.28	8.2	Ko	7	..	41088b
29	485	35.6	-59 33	9.1	9.0	Ko	2	..	20548b	79	2468	35.9	-33 2	9.1	9.7	Ko	1	..	14690b
30	486	35.6	-59 42	9.1	10.1	Ko	1	..	20548b	80	2004	35.9	-40 12	9.4	9.5	G5	2	..	20649b
31	..	35.6	-67 39	..	..	Pd.	..	..	76,22	81	1864	35.9	-50 42	6.62	7.1	Ao	8	..	20643b
32	411	35.6	-70 33	10.2	10.3	A2	3	..	20540b	82	868	35.9	-54 52	8.34	9.2	K2	3	..	20548b
33	391	35.6	-72 18	9.7	10.1	F5	2	..	15167b	83	489	36.0	+65 35	9.0	9.5	F8	2	..	38154i
34	260	35.7	+74 40	9.0	9.0	Ao	2	..	37343i	84	996	36.0	+22 37	6.47	7.54	K2	5	..	38084i
35	932	35.7	+54 48	6.80	6.80	Ao	6	1,8	37366i	85	1049	36.0	+20 27	9.0	9.1	A5	2	..	38084i
36	1270	35.7	+44 48	7.67	7.73	A2	5	..	37391i	86	925	36.0	+9 9	7.38	7.33	B8	4	E	14071b
37	1233	35.7	+36 9	8.0	7.8	B3	3	R	38124i	87	989	36.0	+6 1	8.9	9.9	Ko	2	..	39685b
38	839	35.7	+27 43	8.5	8.5	B9	4	E	37525i	88	1152	36.0	+0 17	5.99	6.13	A5	B	..	12754b
39	989	35.7	+22 50	8.0	8.4	F5	3	..	38084i	89	1006	36.0	-1 12	9.6	9.7	A2	3	..	12754b
40	1019	35.7	+19 10	8.2	8.2	Ao	3	..	38084i	90	1358	36.0	-5 4	10.0	10.6	G	1	..	4898m
41	1008	35.7	+4 6	8.3	9.3	Ko	3	..	39866b	91	1359	36.0	-5 36	8.6	9.4	G5	2	5,2	18394b
42	1338	35.7	-2 0	2.05	1.81	Bo	..	R	28,198	92	1234	36.0	-19 16	8.0	8.5	F5	6	..	41088b
43	..	35.7	-2 0	4.21	3.97	..	..	..	..	93	1185	36.0	-22 45	9.6	9.8	A5	3	..	41088b
44	1337	35.7	-2 53	6.07	5.95	B5	6	..	37550i	94	2398	36.0	-29 41	8.8	9.3	Fo	3	..	14690b
45	1212	35.7	-3 59	9.6	9.6	Ao	3	..	4898m	95	2375	36.0	-34 8	2.75	2.63	B5p	..	3,7 R	28,198
46	1283	35.7	-6 13	9.6	10.0	F5	1	..	4898m	96	461	36.0	-64 50	9.7	9.7	Ao	3	..	38371b
47	1148	35.7	-7 43	7.56	8.56	Ko	4	5,3	4898m	97	475	36.0	-67 56	8.9	9.5	G	2	E	38367b
48	2584	35.7	-25 41	9.4	9.2	A3	2	..	18557b	98	353	36.0	-71 0	9.5	10.5	Ko	4	0,2	15167b
49	2325	35.7	-37 44	9.3	9.1	F5	1	..	12665b	99	1256	36.1	+41 40	6.74	7.30	Go	5	..	37391i
50	1219	35.8	+51 0	9.4	9.5	A5	2	..	37366i	100	964	36.1	+29 48	7.31	7.87	Go	4	5,4	37377i

THE HENRY DRAPER CATALOGUE.

37800

5^h 36^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	937	36.1	+21 32	8.8	8.8	Ao	3	..	38084i	51	2009	36.3	-40 21	10.9	10.1	G	1	..	20649b
2	926	36.1	+ 9 7	9.1	9.1	Ao	3	..	39685b	52	2008	36.3	-40 45	8.0	7.9	F2	6	..	14691b
3	975	36.1	+ 7 27	8.9	9.0	A3	3	..	39685b	53	437	36.3	-66 21	9.1	10.5	Ma	2	..	38371b
4	1036	36.1	+ 2 19	8.7	9.2	F8	2	..	39866b	54	321	36.3	-75 18	8.33	8.5	Ao	7	..	20540b
5	1343	36.1	- 2 20	8.6	8.7	A5	8	..	12754b	55	72	36.3	-85 46	9.2	9.5	F2	5	..	15145b
6	1344	36.1	- 2 46	8.6	8.6	Ao	7	..	12754b	56	544	36.4	+64 43	6.86	7.86	Ko	3	..	36654i
7	1171	36.1	- 3 40	8.6	8.6	B8	7	0.4	4898m	57	602	36.4	+63 15	7.57	7.85	Fo	5	..	36654i
8	1258	36.1	-10 28	6.36	6.31	B8	7	1,10	37625i	58	1053	36.4	+56 48	9.2	9.2	Ao	2	..	37366i
9	1232	36.1	-12 16	8.0	8.8	G5	2	..	20485b	59	1127	36.4	+33 16	6.84	7.26	F5	6	..	37377i
10	2415	36.1	-26 59	8.6	8.9	F	1	..	12398b	60	991	36.4	+ 5 48	9.3	9.7	F5	1	..	39685b
11	2479	36.1	-32 41	5.53	6.3	Ko	..	5,10	56,121	61	1229	36.4	-21 16	8.6	9.7	Ko	6	..	41088b
12	2378	36.1	-34 41	8.5	9.5	Ko	2	..	14690b	62	2423	36.4	-27 49	8.0	8.9	G5	3	..	12398b
13	2096	36.1	-39 42	9.4	9.3	F8	4	..	20649b	63	1915	36.4	-48 16	9.7	9.6	A2	2	..	12756b
14	1994	36.1	-41 49	8.8	9.2	G5	3	..	14691b	64	755	36.4	-52 5	8.8	9.6	Ko	2	..	24143b
15	1964	36.1	-43 47	8.6	9.7	K2	3	..	14691b	65	895	36.4	-56 46	9.4	9.8	F5	2	..	20548b
16	207	36.1	-77 2	9.9	10.9	Ko	2	E	20652b	66	371	36.5	+70 31	8.9	8.9	Ao	2	..	38112i
17	370	36.2	+70 12	9.4	9.5	A2	2	..	38112i	67	1212	36.5	+35 11	8.57	8.52	B8	2	..	38124i
18	1210	36.2	+35 20	8.6	8.6	Ao	3	..	38124i	68	1054	36.5	+20 34	8.4	8.4	Ao	4	..	38084i
19	856	36.2	+28 57	8.2	8.7	F8	2	7.4 R	37377i	69	918	36.5	+18 38	8.1	8.4	F2	4	..	37602i
20	908	36.2	+26 24	8.4	9.4	Ko	1	E	38084i	70	957	36.5	+13 34	8.3	8.3	Ao	5	..	37602i
21	1000	36.2	+22 20	8.8	8.8	Ao	3	..	38084i	71	999	36.5	+ 6 34	8.3	9.1	G5	3	0.2	38412b
22	927	36.2	+ 9 34	9.1	9.6	F8	2	..	39685b	72	1100	36.5	+ 1 44	8.9	9.0	A2	5	..	39866b
23	990	36.2	+ 5 35	9.3	9.6	F2	2	..	39685b	73	1101	36.5	+ 1 34	9.1	9.7	Go	1	..	39866b
24	1007	36.2	+ 3 44	7.20	7.98	G5	3	..	14071b	74	1216	36.5	- 4 3	10.3	10.4	A2	2	..	4898m
25	1008	36.2	- 1 3	9.1	9.7	Go	3	..	12754b	75	1260	36.5	-11 2	9.0	9.8	G5	1	..	18414b
26	1361	36.2	- 5 1	9.4	10.0	Go	2	..	4898m	76	1870	36.5	-50 4	10.1	9.7	A	2	..	12756b
27	1203	36.2	- 9 50	8.61	9.17	Go	2	..	18414b	77	845	36.5	-55 0	7.08	8.4	K2	6	..	20548b
28	1258	36.2	-11 15	7.07	8.07	Ko	4	..	20485b	78	354	36.5	-71 48	8.4	9.4	Ko	4	..	20540b
29	1213	36.2	-13 44	8.6	9.6	Ko	1	..	18414b	79	236	36.6	+75 42	7.82	8.32	F8	6	0.5	37558i
30	1227	36.2	-21 2	9.4	10.2	Ko	2	..	41088b	80	1012	36.6	+55 40	8.7	8.7	Ao	2	..	37366i
31	1186	36.2	-22 42	8.0	7.9	Ao	4	..	18557b	81	920	36.6	+18 57	7.47	8.47	Ko	4	0.3	37602i
32	2552	36.2	-30 42	8.0	9.3	K2	4	..	14690b	82	..	36.6	+ 9 2	Neb.	Neb.	Pf	..	R	76,22
33	1995	36.2	-41 7	10.0	9.8	G5	3	E	20649b	83	1043	36.6	+ 8 16	9.3	9.4	A2	2	..	38223i
34	857	36.2	-57 52	9.0	9.8	G5	2	..	20548b	84	1012	36.6	+ 4 56	7.75	7.89	A5	4	..	14071i
35	466	36.2	-63 13	10.5	10.5	Ao	2	..	38371b	85	1102	36.6	+ 1 50	9.1	9.7	Go	2	..	39866b
36	401	36.2	-69 44	..	10.8	Pec.	..	R	M	86	1172	36.6	- 3 2	9.1	9.1	B9	4	..	12754b
37	910	36.3	+57 12	7.8	8.9	K2	3	..	37407i	87	1173	36.6	- 3 46	8.0	8.0	Ao	6	0.4	4898m
38	991	36.3	+52 40	8.0	8.0	B8	4	2.3	37407i	88	1286	36.6	- 6 48	9.1	9.1	Ao	4	0.3	18394b
39	1220	36.3	+50 45	8.0	9.0	Ko	2	..	37366i	89	1151	36.6	- 6 59	8.0	8.0	B8	6	0.3	4898m
40	1189	36.3	+47 40	7.38	8.38	Ko	3	0.3	37391i	90	1237	36.6	-12 3	8.6	8.6	Ao	3	..	18414b
41	1257	36.3	+41 5	7.16	7.11	B8	5	..	37391i	91	3308	36.6	-24 5	10.3	10.1	K	1	..	41088b
42	1388	36.3	+39 56	8.37	8.37	Ao	2	..	38124i	92	1999	36.6	-41 54	9.4	9.5	Go	2	..	20649b
43	911	36.3	+11 7	9.1	9.2	A2	1	..	38223i	93	1871	36.6	-50 11	9.5	8.7	G5	4	..	12756b
44	852	36.3	+10 3	8.92	9.99	K2	1	..	39685b	94	1872	36.6	-50 11	9.5	8.7	G5	4	..	12756b
45	1009	36.3	- 1 22	8.8	8.8	Ao	4	..	12754b	95	1570	36.6	-51 41	9.2	9.4	A5	3	..	24143b
46	1197	36.3	- 8 5	7.60	7.60	Ao	5	2.4	12770b	96	756	36.6	-52 33	8.9	9.3	Go	4	..	24143b
47	1149	36.3	-20 20	7.02	8.5	Ko	7	..	17395b	97	859	36.6	-57 16	9.0	9.3	A2	3	..	20548b
48	1187	36.3	-22 12	8.2	8.2	F5	3	..	18557b	98	490	36.6	-59 50	8.6	8.1	Fo	5	..	20548b
49	2976	36.3	-23 5	9.0	9.1	A5	4	..	41088b	99	355	36.6	-71 12	8.1	9.2	K2	5	..	20540b
50	2641	36.3	-31 18	7.51	7.6	Ao	6	1.6	9061b	100	1267	36.7	+38 2	8.7	8.7	Ao	3	..	38124i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

37900

5^h 36^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	941	36.7	+21 32	9.4	9.5	A2	2	..	38084i	51	2070	37.0	-42 15	10.3	9.8	F5	2	..	20649b
2	869	36.7	+12 56	8.5	8.6	A3	3	..	37602i	52	1971	37.0	-43 32	8.5	9.9	Ko	1	..	14691b
3	1345	36.7	-2 18	8.6	8.4	B3	8	..	12754b	53	491	37.0	-61 33	8.5	9.0	Ko	4	..	38371b
4	1346	36.7	-2 57	6.33	6.61	Fo	5	..	37550i	54	910	37.1	+59 48	9.2	9.3	A2	2	..	37407i
5	1231	36.7	-21 35	7.8	8.3	Fo	3	E	18557b	55	1301	37.1	+48 56	8.9	9.0	A5	2	..	37366i
6	2594	36.7	-25 43	9.0	8.6	B9	3	..	18557b	56	970	37.1	+29 10	6.74	7.74	Ko	4	..	37377i
7	2559	36.7	-30 46	9.1	9.6	Go	2	..	14690b	57	1010	37.1	+3 38	9.3	9.4	A2	1	..	39866b
8	445	36.7	-60 42	9.0	9.6	Go	2	..	38371b	58	1040	37.1	+2 19	6.61	6.56	B8	6	..	14071i
9	148	36.7	-81 39	8.5	8.6	A3	8	..	20557b	59	1103	37.1	+1 51	8.8	9.6	G5	3	..	39866b
10	183	36.8	+80 14	8.9	9.9	Ko	2	..	37558i	60	1211	37.1	-17 46	8.0	8.0	Ao	4	..	20485b
11	1395	36.8	+49 3	8.6	9.4	G5	2	..	37366i	61	2413	37.1	-29 46	7.00	8.4	G5	6	..	14690b
12	1129	36.8	+33 32	8.7	8.8	A2	2	..	37377i	62	2652	37.1	-31 23	7.9	8.7	Go	5	..	14690b
13	1008	36.8	+3 55	8.9	9.9	Ko	1	..	39866b	63	2488	37.1	-32 3	8.2	9.3	Ko	3	..	14690b
14	1056	36.8	-0 36	10.3	10.4	A2	2	..	12754b	64	2017	37.1	-40 18	10.4	9.8	Go	2	..	20649b
15	1174	36.8	-3 32	9.1	9.6	F8	3	2,3	4898m	65	535	37.1	-58 19	8.2	8.8	Ko	4	..	20548b
16	1204	36.8	-9 32	8.4	8.7	Fo	4	..	12770b	66	1269	37.2	+38 13	8.2	8.7	F8	3	..	38124i
17	1191	36.8	-22 39	9.4	9.4	F2	3	..	41088b	67	1015	37.2	+23 10	6.06	5.89	B3	8	..	38084i
18	3314	36.8	-24 29	9.8	10.1	F5	2	..	41088b	68	925	37.2	+18 28	8.5	8.6	A2	2	2,2	38084i
19	2004	36.8	-41 35	7.5	8.6	Ko	5	..	14691b	69	979	37.2	+7 5	9.3	9.4	A3	2	..	39685b
20	2066	36.8	-42 57	8.7	9.2	G5	4	..	14691b	70	1240	37.2	-12 21	7.22	7.28	A2	8	..	20485b
21	1968	36.8	-47 39	9.1	9.6	F8	2	..	12756b	71	1208	37.2	-16 46	6.10	5.98	B5	8	0,10	44350b
22	497	36.8	-62 51	10.4	11.4	Ko	1	..	38371b	72	1972	37.2	-43 38	7.8	9.6	K2	3	..	14691b
23	935	36.9	+54 44	8.8	10.0	K5	1	..	37366i	73	1830	37.2	-49 54	9.5	9.9	A3	3	..	12756b
24	934	36.9	+25 20	8.2	8.2	Ao	4	..	38084i	74	420	37.2	-69 26	..	11.2	Pec.	..	..	76,31
25	1003	36.9	+22 25	8.7	8.7	A	4	..	38084i	75	993	37.3	+52 36	8.2	8.8	Go	2	5,2 R	37407i
26	1044	36.9	+8 20	7.8	8.8	Ko	3	..	38223i	76	1222	37.3	+50 42	8.9	9.4	F8	3	..	37366i
27	1348	36.9	-2 51	8.8	8.8	B9	6	..	12754b	77	1397	37.3	+40 22	8.2	8.8	Go	1	..	38124i
28	1218	36.9	-4 31	10.3	10.6	F2	1	..	4898m	78	920	37.3	+26 16	8.6	8.9	F	2	R	38084i
29	1363	36.9	-5 21	9.1	9.7	Go	2	..	4898m	79	931	37.3	+24 3	7.9	8.9	Ko	2	..	38084i
30	1158	36.9	-18 30	8.8	9.8	Ko	2	..	18522b	80	1007	37.3	+22 10	8.8	8.8	Ao	2	..	38084i
31	2013	36.9	-40 28	10.4	10.3	G	1	..	20649b	81	991	37.3	+14 8	6.94	7.72	G5	7	..	37602i
32	1916	36.9	-48 38	9.9	9.9	A5	1	..	12756b	82	964	37.3	+13 6	8.5	8.9	F5	2	..	37602i
33	491	36.9	-59 10	7.09	6.6	A2	6	2,10	20516b	83	981	37.3	+7 26	9.6	9.7	A2	3	..	39685b
34	446	36.9	-60 7	8.2	8.1	Fo	6	..	20548b	84	1105	37.3	+1 26	5.24	6.02	G5	7	R	14071b
35	439	36.9	-66 37	6.44	6.44	Ao	8	0,5	42853b	85	1177	37.3	-3 22	9.0	9.1	A3	4	..	12754b
36	356	36.9	-71 44	8.4	9.4	Ko	4	..	20540b	86	1126	37.3	-15 40	8.0	8.8	G5	7	..	20485b
37	1338	37.0	+43 31	7.70	8.48	G5	3	..	37391i	87	2393	37.3	-26 23	7.6	8.3	F5	6	..	18557b
38	1014	37.0	+23 42	8.8	8.8	Ao	1	..	38084i	88	2562	37.3	-30 32	9.1	9.9	G5	1	..	14690b
39	1004	37.0	+22 38	8.4	8.4	B9	4	..	38084i	89	2480	37.3	-33 21	9.0	9.0	F5	5	..	14690b
40	923	37.0	+18 57	6.68	6.66	B9	8	1,9	37602i	90	2390	37.3	-36 38	8.0	8.3	F8	5	..	12665b
41	985	37.0	+17 20	8.4	9.4	Ko	4	..	37602i	91	468	37.3	-63 31	9.7	10.3	Go	2	..	38371b
42	988	37.0	+14 59	8.34	8.68	F2	4	..	37602i	92	393	37.3	-72 34	9.7	10.3	Go	2	..	15167b
43	855	37.0	+10 30	7.08	7.22	A5	5	..	38223i	93	316	37.3	-73 48	5.61	8.5	Mb	..	5,10	56,121
44	1003	37.0	+6 37	7.8	8.2	F5	2	..	14071b	94	336	37.3	-76 50	9.9	10.9	Ko	1	E	20652b
45	1039	37.0	+2 35	8.3	8.6	F2	4	..	39866b	95	936	37.4	+54 2	8.0	8.8	G5	3	5,3-	37408i
46	1125	37.0	-15 23	7.25	8.25	Ko	7	..	20485b	96	941	37.4	+53 15	8.6	8.7	A2	4	0,3	37366i
47	3319	37.0	-24 37	9.0	9.8	Go	3	R	41088b	97	1275	37.4	+44 48	8.6	9.1	F8	1	..	38935i
48	3319	37.0	-24 37	9.0	9.8	Go	3	R	41088b	98	940	37.4	+25 15	8.0	8.0	Ao	3	..	38084i
49	2598	37.0	-25 34	8.0	8.0	B9	5	..	18557b	99	946	37.4	+21 23	8.4	8.4	Ao	3	..	38084i
50	2651	37.0	-31 27	8.4	9.7	G5	1	..	14690b	100	996	37.4	+5 48	7.8	8.8	Ko	4	..	39685b

THE HENRY DRAPER CATALOGUE.

38000

5^h 37^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1013	37.4	+ 3 38	8.7	9.1	F5	2	..	39866b	51	1223	37.8	- 4 41	8.6	8.6	B8	5	2,4	4898m
2	1059	37.4	- 0 4	7.08	8.08	Ko	7	..	12754b	52	1291	37.8	- 6 52	9.4	9.5	A2	2	0,1	4898m
3	2657	37.4	-31 17	8.8	9.9	Ko	2	..	14690b	53	1265	37.8	-10 40	7.09	7.59	F8	7	..	12770b
4	493	37.4	-61 13	7.8	7.8	Ao	3	1,6	20516b	54	1214	37.8	-17 34	6.33	7.33	Ko	5	..	20485b
5	1056	37.5	+56 41	9.2	9.2	Ao	2	..	37366i	55	3339	37.8	-24 27	8.8	9.8	K5	2	..	41088b
6	937	37.5	+54 23	9.2	9.2	Ao	2	..	37366i	56	2483	37.8	-33 27	6.38	6.0	Ao	..	0,5	56,121
7	994	37.5	+52 8	8.1	8.7	Go	5	0,5	37407i	57	2456	37.8	-35 18	8.4	8.5	F2	5	2,5 R	46181b
8	1218	37.5	+35 30	8.6	8.7	A2	1	..	38124i	58	604	37.9	+63 34	6.62	7.40	G5	7	..	36654i
9	846	37.5	+27 15	7.8	7.8	B9	3	..	38084i	59	1302	37.9	+48 57	8.0	9.0	Ko	3	..	37366i
10	941	37.5	+25 24	6.86	6.67	B2p	6	R	38084i	60	1276	37.9	+44 40	9.2	9.2	A	1	..	38935i
11	847	37.5	+16 37	8.7	8.7	Ao	4	..	37602i	61	1076	37.9	+32 12	8.0	8.3	Fo	3	..	37377i
12	997	37.5	+ 5 34	8.7	8.8	A2	2	..	38223i	62	975	37.9	+29 58	8.11	8.09	B9	4	..	37377i
13	1016	37.5	+ 4 48	9.30	9.30	Ao	2	..	39866b	63	949	37.9	+21 55	9.1	9.1	B8	2	..	38084i
14	1041	37.5	+ 2 40	8.8	9.8	Ko	2	..	39866b	64	934	37.9	+18 36	8.9	8.9	Ao	2	..	37602i
15	337	37.5	-76 57	10.2	10.8	G	2	E	20652b	65	852	37.9	+16 19	8.9	8.9	Ao	2	..	37602i
16	408	37.6	+68 40	8.6	9.4	G5	2	..	38112i	66	998	37.9	+14 22	8.7	8.7	B8	2	..	37602i
17	992	37.6	+30 53	8.1	8.1	B8	3	..	37377i	67	999	37.9	+14 15	8.8	8.8	Ao	3	..	37602i
18	934	37.6	+25 2	8.81	8.87	A2	2	..	38084i	68	875	37.9	+12 58	7.8	7.8	Ao	4	..	37602i
19	931	37.6	+18 6	8.7	8.7	B9	3	..	37602i	69	1004	37.9	+ 6 27	8.9	9.4	F8	2	..	39685b
20	933	37.6	+ 9 39	8.9	9.0	A2	2	..	38223i	70	1160	37.9	+ 0 8	9.3	9.9	Go	2	..	12754b
21	983	37.6	+ 7 17	8.1	8.2	A5	3	..	14071i	71	1153	37.9	- 7 23	8.0	8.4	F5	4	3,4	10366b
22	998	37.6	+ 5 12	7.86	7.84	B9	3	..	14071i	72	1267	37.9	-11 40	7.19	8.19	Ko	4	..	20485b
23	1199	37.6	- 8 11	8.8	8.8	B9	4	..	18394b	73	3000	37.9	-23 10	9.3	9.4	A5	3	..	41088b
24	1210	37.6	- 9 38	7.71	8.71	Ko	4	..	12770b	74	2997	37.9	-23 23	10.8	9.8	F5	2	..	41088b
25	1219	37.6	-13 2	7.44	8.22	G5	5	..	20485b	75	3340	37.9	-24 23	9.1	10.1	K2	2	..	41088b
26	3335	37.6	-24 53	9.25	9.2	F8	4	..	41088b	76	2565	37.9	-30 43	8.8	9.4	Go	2	..	14690b
27	2107	37.6	-45 47	9.2	9.9	Ko	2	..	12756b	77	2485	37.9	-33 43	9.6	9.7	Go	2	..	14690b
28	1878	37.6	-50 44	9.1	9.3	Ao	4	..	12756b	78	2458	37.9	-35 45	8.7	9.1	Go	2	..	46181b
29	429	37.6	-69 15	..	11.3	Oa	..	..	76,28	79	2397	37.9	-36 57	9.0	10.3	K5	1	..	46181b
30	..	37.6	-69 30	..	..	Oa	..	..	76,28	80	2121	37.9	-39 56	9.10	9.2	F5	5	..	20649b
31	186	37.6	-79 4	8.9	9.4	F8	5	0,3	15162b	81	865	37.9	-57 14	10.1	10.1	Ao	2	..	20548b
32	1134	37.7	+33 4	7.7	7.8	A2	4	..	37377i	82	1223	38.0	+50 36	8.5	8.9	F5	2	..	37366i
33	1069	37.7	+31 58	7.9	8.7	G5	3	..	37377i	83	1399	38.0	+39 25	9.5	9.5	Ao	2	..	38124i
34	974	37.7	+29 28	8.2	8.1	B5	3	..	37377i	84	849	38.0	+27 42	7.8	7.8	Ao	5	..	37377i
35	1064	37.7	+20 28	9.0	9.0	A	2	..	38084i	85	877	38.0	+12 6	9.1	9.1	A	2	..	38223i
36	1045	37.7	+19 30	9.3	9.4	A5	2	..	38084i	86	1018	38.0	+ 4 38	9.6	10.0	F5	3	..	39866b
37	850	37.7	+16 40	8.3	8.3	Ao	5	..	37602i	87	1350	38.0	- 2 21	8.6	8.6	B8	6	..	12754b
38	999	37.7	+ 5 28	8.9	9.3	F5	1	..	39685b	88	1224	38.0	- 4 52	9.6	9.7	A2	2	..	4898m
39	1014	37.7	+ 3 32	8.4	9.4	Ko	2	..	39866b	89	1293	38.0	- 6 51	5.98	6.40	F5	6	0, R	37550i
40	1221	37.7	- 4 53	9.6	10.2	Go	1	..	4898m	90	1194	38.0	-22 25	5.86	5.7	A2	..	0,9	56,121
41	1837	37.7	-49 35	8.7	9.7	G5	2	..	12756b	91	1058	38.1	+56 5	6.06	6.12	A2	8	0,9	37366i
42	495	37.7	-59 1	6.8	7.8	Ko	7	..	20548b	92	1277	38.1	+38 27	7.52	8.52	Ko	4	..	38124i
43	464	37.7	-64 58	9.61	9.5	A2	3	..	38371b	93	1306	38.1	+37 33	8.4	8.7	Fo	3	..	38124i
44	394	37.7	-72 58	9.7	10.9	K5	3	..	20540b	94	993	38.1	+30 27	7.51	8.29	G5	5	..	37377i
45	395	37.7	-72 58	8.9	10.1	K5	3	..	20540b	95	939	38.1	+10 0	8.52	8.58	A2	3	..	38223i
46	859	37.8	+10 28	7.83	8.90	K2	3	..	38223i	96	1049	38.1	+ 8 43	8.2	8.5	Fo	3	..	14071b
47	1107	37.8	+ 1 27	8.8	8.8	Ao	4	..	39866b	97	988	38.1	+ 7 52	8.4	8.5	A2	2	..	38223i
48	1158	37.8	+ 0 30	9.6	9.6	B9	2	..	12754b	98	1001	38.1	+ 5 19	7.7	7.7	B8	7	..	14071b
49	1060	37.8	- 0 1	8.58	9.65	K2	1	..	12754b	99	1012	38.1	- 1 39	6.49	7.56	K2	2	3,10	37550i
50	1061	37.8	- 0 2	8.28	9.28	Ko	2	..	12754b	100	1215	38.1	-17 3	8.1	8.1	Ao	3	..	20485b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

38100

5^h 38^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1195	38.1	-22 32	9.1	9.8	Ko	2	..	41088b	51	339	38.5	-74 18	9.9	10.0	A3	4	..	15162b
2	2080	38.1	-42 37	10.6	10.1	Go	2	..	20649b	52	1225	38.6	+35 40	8.8	10.0	K5	1	..	38124i
3	215	38.2	+77 8	9.2	10.0	G5	3	..	37558i	53	871	38.6	+28 9	8.1	8.1	Ao	3	..	37377i
4	1398	38.2	+49 47	5.52	5.52	Ao	..	2,8R	56,81	54	1007	38.6	+6 53	7.9	7.9	B9	3	..	14071i
5	1072	38.2	+31 17	8.2	8.8	Go	3	..	37377i	55	1166	38.6	+1 0	8.79	8.93	A5	3	..	12754b
6	1003	38.2	+14 38	8.9	9.0	A2	2	..	37602i	56	1240	38.6	-21 5	9.1	9.4	Go	3	..	17395b
7	989	38.2	+7 56	8.3	9.1	G5	3	..	39685b	57	3012	38.6	-23 34	10.5	9.1	Fo	3	..	41088b
8	1005	38.2	+6 51	7.18	7.13	B8	6	..	14071b	58	2492	38.6	-33 15	9.4	9.6	F8	2	..	14690b
9	1369	38.2	-5 51	9.1	9.2	A5	2	..	12754b	59	2405	38.6	-36 26	8.2	9.5	Ko	2	..	46181b
10	1155	38.2	-7 31	8.07	8.85	G5	5	0,5	4898m	60	820	38.7	+61 3	9.0	10.2	K5	1	..	38154i
11	1159	38.2	-20 12	8.6	8.8	Fo	5	..	17395b	61	937	38.7	+26 18	7.22	7.20	B9	5	..	37377i
12	465	38.2	-64 9	9.5	10.5	Ko	2	..	38371b	62	953	38.7	+25 44	8.1	8.1	Ao	3	..	38084i
13	1137	38.3	+33 41	7.36	8.14	G5	5	..	37377i	63	1051	38.7	+8 43	8.9	10.1	K5	1	..	38412b
14	1077	38.3	+32 22	8.4	9.2	G5	2	..	37377i	64	1008	38.7	+6 29	7.7	8.5	G5	2	..	14071b
15	994	38.3	+30 35	7.9	8.7	G5	2	..	37377i	65	1013	38.7	-0 58	8.8	8.8	B9	4	..	12754b
16	868	38.3	+28 59	8.1	8.0	B5	3	..	37377i	66	1157	38.7	-7 9	9.8	10.8	K	1	..	4898m
17	920	38.3	+11 22	7.7	8.7	Ko	4	5,3	38223i	67	1156	38.7	-7 56	8.2	8.7	F8	5	..	18394b
18	1021	38.3	+4 28	8.8	9.2	F5	2	..	39866b	68	1199	38.7	-22 26	9.1	8.9	B9	6	..	41088b
19	1163	38.3	+0 8	8.43	9.43	Ko	3	..	12754b	69	2672	38.7	-31 57	9.6	9.4	A5	4	..	14690b
20	1370	38.3	-5 3	8.80	8.80	Ao	3	0,4	18394b	70	2401	38.7	-34 43	5.31	5.29	B9	..	0,9	56,121
21	1245	38.3	-12 23	8.0	9.2	K5	2	..	12770b	71	2029	38.7	-40 19	10.9	9.8	F8	2	..	20649b
22	2015	38.3	-41 47	9.0	9.5	Ko	3	..	20649b	72	2190	38.7	-44 58	8.68	9.6	K2	2	..	12756b
23	2081	38.3	-42 19	8.5	9.5	K2	4	0,2	20649b	73	421	38.7	-70 28	9.1	9.4	Fo	5	..	20540b
24	396	38.3	-72 51	9.8	10.6	G5	1	..	15167b	74	420	38.7	-70 44	10.1	11.2	K2	2	..	15167b
25	319	38.3	-73 29	10.0	10.0	Ao	4	..	15167b	75	321	38.7	-73 2	8.8	9.8	Ko	5	..	20540b
26	194	38.4	+81 20	8.00	8.78	G5	3	..	37558i	76	821	38.8	+61 15	9.2	10.2	Ko	2	..	38154i
27	857	38.4	+58 56	7.50	7.92	F5	5	..	37407i	77	1061	38.8	+56 24	8.7	9.3	Go	2	..	37407i
28	856	38.4	+58 46	6.60	7.60	Ko	5	..	37407i	78	1400	38.8	+49 6	7.7	8.0	Fo	3	2,3	37366i
29	1059	38.4	+56 53	6.79	6.79	Ao	6	0,7	37366i	79	1193	38.8	+47 53	6.74	6.72	B9	4	0,3	37366i
30	1387	38.4	+42 49	8.0	9.2	K5	1	..	38935i	80	873	38.8	+28 14	8.5	8.6	A5	2	..	37377i
31	1223	38.4	+35 8	8.12	8.10	B9	3	..	38124i	81	1070	38.8	+20 40	9.1	9.5	F5	1	..	38084i
32	953	38.4	+21 20	9.4	9.4	A	1	..	38084i	82	1008	38.8	+15 1	7.14	7.70	Go	5	..	37602i
33	938	38.4	+18 49	7.5	7.5	Ao	5	1,7	38084i	83	1373	38.8	-5 12	9.1	10.2	K2	1	..	4898m
34	880	38.4	+12 41	8.3	9.3	Ko	1	..	38223i	84	1158	38.8	-7 20	9.1	9.1	Ao	3	0,2	4898m
35	1180	38.4	-3 37	9.6	10.4	G5	1	0,1	12754b	85	1213	38.8	-8 58	7.37	7.35	B9	7	0,4	12770b
36	1269	38.4	-11 52	8.6	8.6	Ao	3	..	12770b	86	868	38.8	-57 53	9.5	9.6	A5	2	..	20548b
37	2446	38.4	-27 45	7.88	8.3	A3	5	..	18557b	87	495	38.9	+65 8	8.80	8.80	Ao	3	..	38154i
38	2571	38.4	-30 35	6.22	6.22	Ao	9	..	9061b	88	1278	38.9	+44 44	7.82	7.82	Ao	3	..	37391i
39	2668	38.4	-31 57	7.6	9.9	K2	2	..	14690b	89	1403	38.9	+40 28	6.48	6.56	A3	6	E	37391i
40	911	38.5	+59 36	8.8	9.2	F5	3	..	37407i	90	1017	38.9	+22 52	8.5	9.3	G5	2	..	38084i
41	1139	38.5	+33 35	6.79	7.21	F5	6	..	37377i	91	958	38.9	+21 25	9.5	9.3	B	4	R	26124i
42	940	38.5	+24 53	7.96	8.74	G5	3	..	38084i	92	1073	38.9	+20 31	8.2	8.2	B9	5	..	38084i
43	939	38.5	+18 29	8.3	8.4	A2	2	3,3	38084i	93	1019	38.9	+3 18	9.6	9.7	A5	1	..	39866b
44	967	38.5	+13 17	8.9	8.9	A	1	..	38223i	94	1181	38.9	-3 39	8.8	8.9	A5	5	5,3	4898m
45	1018	38.5	+3 58	8.1	8.4	Fo	3	..	14071i	95	2495	38.9	-33 3	8.5	8.8	Ao	4	5,2	14690b
46	1166	38.5	-18 24	8.4	8.4	Ao	3	..	41088b	96	2404	38.9	-34 1	10.7	9.7	A2	3	..	14690b
47	3011	38.5	-23 53	10.1	9.4	G5	2	..	41088b	97	1014	39.0	+55 36	8.0	9.0	Ko	2	..	37407i
48	915	38.5	-53 7	8.4	8.9	Fo	4	..	24143b	98	1302a	39.0	+48 39	9.4	9.4	A	2	..	37366i
49	916	38.5	-53 16	7.4	7.8	A2	7	..	24143b	99	1308	39.0	+37 38	7.72	9.07	Ma	3	..	38124i
50	485	38.5	-67 14	9.3	9.9	G	2	E	38367b	100	1080	39.0	+31 17	6.73	7.73	Ko	5	..	37377i

THE HENRY DRAPER CATALOGUE.

38200

5^h 39^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	946	39.0	+18 42	8.8	8.8	Ao	2	..	38084i	51	1166	39.3	-20 25	9.0	9.1	Ko	4	..	17395b
2	1113	39.0	+1 45	10.3	11.1	G5	1	..	39866b	52	1165	39.3	-20 27	9.6	8.9	A2	4	..	17395b
3	1168	39.0	+0 55	8.44	8.52	A3	5	..	12754b	53	2412	39.3	-34 0	7.26	8.1	G5	5	..	1469ob
4	1182	39.0	-3 51	9.4	9.8	F5	2	5,3	4898m	54	2476	39.3	-35 8	10.0	9.7	Go	1	..	44364b
5	1270	39.0	-11 20	8.0	9.0	Ko	3	..	18414b	55	1894	39.3	-50 3	8.90	9.4	G5	4	..	12756b
6	1172	39.0	-18 36	5.75	5.73	B9	8	..	4435ob	56	501	39.3	-62 59	8.7	9.8	K2	2	..	15147b
7	1162	39.0	-20 13	8.4	8.9	F2	4	..	17395b	57	942	39.4	+54 26	6.61	7.61	Ko	6	5,5	37366i
8	1163	39.0	-20 42	8.4	8.6	A2	5	..	17395b	58	1194	39.4	+47 26	7.38	7.33	B8	5	1,5	37391i
9	1164	39.0	-20 45	9.4	9.7	Go	2	..	17395b	59	1283	39.4	+38 6	9.0	9.0	B8	2	..	38124i
10	2436	39.0	-29 22	8.8	8.8	A3	5	1,4	1469ob	60	958	39.4	+25 42	8.6	9.0	F5	2	..	38084i
11	2356	39.0	-37 30	7.82	8.8	K5	4	..	12665b	61	961	39.4	+25 4	7.81	8.81	Ko	4	..	38084i
12	1930	39.0	-48 18	7.21	7.4	Ao	9	..	12756b	62	971	39.4	+13 32	var.	var.	Go	2	R	37602i
13	1891	39.0	-50 48	8.5	9.7	K5	3	R	12756b	63	884	39.4	+12 51	6.60	6.68	A3	9	..	37602i
14	874	39.0	-54 47	8.0	9.5	K5	3	..	20548b	64	1248	39.4	-19 42	7.44	8.0	G5	7	..	17395b
15	422	39.0	-70 1	8.24	9.4	G5	5	..	2054ob	65	2622	39.4	-25 40	8.4	9.2	G5	3	..	12664b
16	1303	39.1	+48 38	7.72	8.50	G5	3	..	37366i	66	2414	39.4	-26 11	7.8	8.9	Ko	5	..	12664b
17	942	39.1	+24 39	8.0	8.1	A2	3	..	38084i	67	490	39.4	-65 26	9.9	9.9	Ao	3	..	38371b
18	943	39.1	+24 23	var.	var.	Nb	..	R	M	68	456	39.4	-69 9	Neb.	Neb.	Pd	..	R	76,22
19	855	39.1	+16 3	6.81	6.81	Ao	7	..	37602i	69	885	39.5	+12 8	8.9	9.0	A5	2	..	38223i
20	1010	39.1	+14 32	8.3	9.1	G5	2	..	37602i	70	1022	39.5	+3 48	7.5	7.5	B9	4	..	14071b
21	882	39.1	+12 23	7.8	8.6	G5	5	..	37602i	71	1023	39.5	+3 10	8.3	8.4	A2	4	..	38412b
22	929	39.1	+11 23	8.9	9.5	G	1	..	38223i	72	1358	39.5	-2 57	8.6	8.9	F2	3	..	12754b
23	866	39.1	+10 14	9.3	9.4	A5	1	..	38223i	73	1379	39.5	-5 31	7.8	8.1	F2	6	2,6	4898m
24	1054	39.1	+8 36	8.4	9.0	Go	3	5,3	38412b	74	1300	39.5	-6 40	10.0	10.6	G	1	..	4898m
25	1227	39.1	-4 36	8.0	9.0	Ko	5	..	4898m	75	1301	39.5	-6 48	8.6	9.0	F5	4	5,3	18394b
26	2505	39.1	-32 57	9.3	8.8	A2	3	..	1469ob	76	1160	39.5	-7 32	9.1	9.9	G5	1	..	4898m
27	2089	39.1	-42 32	9.9	10.1	Go	1	..	20649b	77	1271	39.5	-10 4	7.16	7.72	Go	7	..	12770b
28	237	39.2	+75 51	8.42	9.49	K2	1	..	37343i	78	1224	39.5	-14 34	8.0	8.4	F5	6	..	20485b
29	1111	39.2	+51 28	6.52	7.30	G5	6	0,5	37407i	79	1202	39.5	-22 50	8.0	9.2	Ko	4	..	41088b
30	1312	39.2	+37 16	7.33	8.33	Ko	5	..	38124i	80	3026	39.5	-23 34	9.8	8.9	F8	4	..	41088b
31	997	39.2	+30 7	8.24	8.12	B5	5	..	37377i	81	502	39.5	-62 41	9.5	9.8	F2	3	..	38371b
32	983	39.2	+29 16	7.40	7.74	F2	4	..	37377i	82	462	39.5	-69 5	..	10.8	Oa	..	..	76,28
33	878	39.2	+28 39	8.8	8.8	B9	3	..	37377i	83	323	39.5	-73 45	6.74	7.3	Go	7	..	2054ob
34	1030	39.2	+23 21	9.0	9.1	A2	2	..	38084i	84	784	39.6	+62 46	6.13	6.19	A2	8	..	36654i
35	917	39.2	+15 36	8.7	9.2	F8	2	..	37602i	85	859	39.6	+58 23	9.0	9.4	F5	2	..	37408i
36	930	39.2	+11 46	8.3	9.1	G5	1	..	38223i	86	1225	39.6	+50 3	7.87	8.87	Ko	3	..	37366i
37	1025	39.2	+4 18	7.7	7.8	A3	5	..	14071i	87	1170	39.6	+45 44	8.0	8.1	A2	3	..	38940i
38	1170	39.2	+0 7	9.3	9.4	A2	4	..	12754b	88	1082	39.6	+20 29	8.6	9.6	Ko	2	..	38084i
39	1297	39.2	-6 46	8.6	8.6	Ao	3	0,2	18394b	89	974	39.6	+13 41	8.7	8.7	B9	3	..	37602i
40	2507	39.2	-32 3	8.7	9.6	Ko	3	..	1469ob	90	1010	39.6	+6 21	8.9	9.0	A2	4	..	38412i
41	2506	39.2	-32 21	9.8	9.9	A2	2	..	44364b	91	1012	39.6	+6 19	7.23	7.18	B8	6	..	14071i
42	2411	39.2	-34 7	8.0	8.8	Ko	3	..	1469ob	92	1231	39.6	-4 45	7.20	7.20	Ao	6	2,5	37550i
43	1987	39.2	-43 33	7.4	8.7	Ko	7	..	14691b	93	1161	39.6	-7 23	9.1	9.7	G	1	..	4898m
44	876	39.2	-54 30	8.0	9.0	K5	4	..	20548b	94	1245	39.6	-21 20	7.22	7.9	Go	8	..	17395b
45	1281	39.3	+44 3	8.2	8.2	Ao	2	..	37391i	95	1244	39.6	-21 28	7.02	8.2	G5	8	..	17395b
46	1405	39.3	+39 2	7.6	8.4	G5	3	..	38124i	96	1203	39.6	-22 44	10.0	10.3	F5	2	..	41088b
47	950	39.3	+18 40	6.90	8.08	K5	6	3,4	37568i	97	2504	39.6	-33 28	7.00	8.8	Ma	5	..	1469ob
48	1171	39.3	+0 3	9.1	9.2	A3	3	..	12754b	98	2480	39.6	-35 18	9.0	9.7	Go	1	..	44364b
49	1357	39.3	-2 22	9.0	9.1	A3	4	..	12754b	99	2039	39.6	-40 4	9.30	10.3	K5	2	..	20649b
50	1221	39.3	-16 23	8.6	9.6	Ko	1	..	18522b	100	2093	39.6	-41 59	9.7	10.4	Ko	1	..	20649b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

38300

5^h 39^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	765	39.6	-52 40	9.3	9.6	F2	1	..	24143b	51	1028	40.0	+ 4 47	8.30	8.30	Ao	2	..	14071i
2	873	39.6	-57 26	9.0	9.8	Ao	3	..	20548b	52	1363	40.0	- 2 33	9.0	9.0	Ao	4	..	12754b
3	872	39.6	-57 29	8.6	9.6	A2	4	..	20548b	53	2046	40.0	-40 48	9.6	9.8	F8	3	..	20649b
4	503	39.6	-62 36	9.9	10.5	Go	1	..	38371b	54	2097	40.0	-42 53	8.3	8.1	B8	6	..	14691b
5	486	39.6	-67 5	8.6	9.0	F5	4	E	38367b	55	1898	40.0	-50 31	9.3	9.6	G5	2	..	12756b
6	963	39.7	+25 53	7.7	7.7	B9	6	E	37377i	56	912	40.1	+57 6	9.4	9.4	Ao	3	..	37407i
7	1083	39.7	+20 39	var.	var.	Nb	2	R	38084i	57	1110	40.1	+51 25	8.7	9.7	Ko	2	..	37366i
8	889	39.7	+12 44	7.54	8.10	Go	6	..	37602i	58	1396	40.1	+42 30	6.41	7.41	Ko	4	..	37391i
9	1025	39.7	+ 3 58	6.14	6.42	Fo	8	..	14071i	59	1146	40.1	+33 6	9.1	9.4	F2	3	..	37377i
10	1174	39.7	+ 0 32	8.8	9.6	G5	1	..	12754b	60	967	40.1	+25 39	8.5	9.3	G5	1	..	38084i
11	1073	39.7	- 0 6	9.1	9.1	Ao	5	..	12754b	61	1025	40.1	+22 44	8.4	9.4	Ko	2	..	38084i
12	1302	39.7	- 6 54	6.67	6.73	A2	6	0,4-	37625i	62	1026	40.1	+22 10	9.0	9.1	A2	2	..	38084i
13	1174	39.7	-18 20	7.32	8.32	Ko	4	..	18522b	63	978	40.1	+21 16	7.79	8.13	F2	4	..	38084i
14	1250	39.7	-19 37	8.0	8.2	F5	7	..	17395b	64	979	40.1	+21 14	7.89	7.95	A2	3	..	38084i
15	3031	39.7	-23 34	10.3	9.5	G5	2	..	41088b	65	1085	40.1	+20 12	8.2	9.2	Ko	3	..	38084i
16	767	39.7	-52 2	8.5	9.3	K2	3	..	24143b	66	950	40.1	+ 9 16	8.9	8.9	B9	2	..	38223i
17	541	39.7	-58 33	8.1	8.8	K5	5	..	20548b	67	1232	40.1	- 4 27	10.3	11.3	Ko	1	..	4898m
18	..	39.7	-70 44	..	..	Pd	..	R	M	68	1250	40.1	-12 49	7.77	7.77	Ao	6	..	20485b
19	1036	39.8	+23 43	7.8	7.8	Ao	5	..	38084i	69	1208	40.1	-22 1	9.8	9.7	Go	1	..	17395b
20	972	39.8	+21 25	9.4	9.5	A2	1	..	38084i	70	3040	40.1	-23 50	9.6	9.5	Ko	2	..	41088b
21	955	39.8	+18 36	8.2	9.0	G5	3	..	37602i	71	499	40.1	-59 49	8.3	7.8	Fo	4	E	18484b
22	998	39.8	+ 7 21	8.9	9.2	F2	3	..	38223i	72	497	40.1	-61 54	8.9	9.6	Fo	3	..	38371b
23	1074	39.8	- 0 43	8.5	9.5	Ko	3	..	12754b	73	217	40.2	+77 54	8.6	9.4	G5	1	..	37343i
24	1162	39.8	- 7 48	8.0	8.0	Ao	6	0,3-	4898m	74	288	40.2	+72 27	7.7	8.2	F8	3	..	37343i
25	3035	39.8	-23 24	10.3	9.5	G5	3	..	41088b	75	826	40.2	+61 20	8.6	9.6	Ko	3	..	38154i
26	1994	39.8	-43 51	9.5	9.3	A3	4	..	14691b	76	1287	40.2	+38 4	9.0	9.0	Ao	2	..	38124i
27	1897	39.8	-50 7	9.7	9.7	A5	2	..	12756b	77	959	40.2	+18 49	8.1	8.4	F2	5	3,5	38084i
28	909	39.8	-56 29	8.1	8.7	Ko	5	..	20548b	78	937	40.2	+11 24	9.1	9.1	A	1	..	38223i
29	467	39.8	-69 47	9.1	9.7	Go	3	..	20540b	79	1060	40.2	+ 8 31	8.3	8.6	Fo	4	..	14071i
30	362	39.8	-71 42	9.9	10.5	Go	2	..	20540b	80	1224	40.2	-16 45	8.0	8.1	A3	4	..	18522b
31	341	39.8	-74 46	8.9	9.7	G5	5	..	15162b	81	1225	40.2	-16 53	9.0	9.1	A3	2	..	12632b
32	338	39.8	-76 32	9.8	10.8	Ko	2	E	20652b	82	1171	40.2	-20 10	6.44	7.4	Go	10	..	17395b
33	1083	39.9	+32 37	7.8	8.8	Ko	3	..	37377i	83	2462	40.2	-27 35	7.5	8.3	A3	6	..	18557b
34	950	39.9	+24 12	8.0	8.1	A3	5	..	38084i	84	2405	40.2	-28 16	7.8	9.5	K5	2	..	12664b
35	975	39.9	+21 41	8.4	9.4	Ko	2	..	38084i	85	2140	40.2	-39 27	6.29	7.2	Fo	9	..	46181b
36	957	39.9	+18 45	7.9	7.9	B9	7	1,7	38084i	86	2027	40.2	-41 55	9.4	9.9	G5	2	..	20649b
37	999	39.9	+ 7 43	8.9	8.9	Ao	2	..	39685b	87	152	40.3	+82 44	7.46	7.96	F8	6	..	37558i
38	1006	39.9	+ 5 54	8.9	9.5	Go	2	..	39685b	88	1016	40.3	+ 6 13	8.9	9.3	F5	3	..	38412b
39	1205	39.9	-22 35	9.1	9.5	Go	3	..	41088b	89	1382	40.3	- 5 10	10.3	10.3	A	1	..	4898m
40	1204	39.9	-22 51	8.8	9.5	Ko	2	..	41088b	90	1221	40.3	- 9 0	8.6	8.9	Fo	2	..	18394b
41	2682	39.9	-31 6	9.6	9.7	Go	3	..	44364b	91	1172	40.3	-20 45	9.1	9.5	Go	3	..	17395b
42	2043	39.9	-40 12	9.8	9.2	Go	5	..	20649b	92	1210	40.3	-22 27	6.41	7.9	G5	5	..	41088b
43	2124	39.9	-45 17	7.52	7.7	B9	8	..	12756b	93	1211	40.3	-22 29	3.80	4.30	F8	..	0,3 R	28,198
44	..	39.9	-69 5	..	..	O	..	R	M	94	3043	40.3	-23 39	9.6	9.4	G5	2	..	41088b
45	363	39.9	-71 20	9.8	10.8	Ko	3	..	15167b	95	2583	40.3	-30 39	8.0	8.8	Fo	5	..	14690b
46	324	39.9	-73 10	10.1	10.5	F5	2	..	15167b	96	2365	40.3	-37 45	8.0	8.5	F5	3	..	12665b
47	997	40.0	+52 40	9.2	9.8	Go	2	..	37366i	97	2142	40.3	-39 58	8.40	8.7	Go	7	..	20649b
48	883	40.0	+28 25	9.4	9.4	A	1	..	37377i	98	339	40.3	-76 4	9.3	10.1	G5	7	..	15162b
49	1013	40.0	+ 6 49	9.1	9.1	B9	2	..	38412b	99	211	40.4	+76 51	8.1	8.5	F5	6	5,5	37558i
50	1014	40.0	+ 6 14	7.38	7.44	A2	5	..	14071i	100	1051	40.4	+46 57	8.0	8.5	F8	2	0,2	37391i

THE HENRY DRAPER CATALOGUE.

38400

5^h 40^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1289	40.4	+38 57	8.5	8.5	Ao	3	..	38124i	51	981	40.8	+21 9	9.0	9.1	A3	3	..	38084i
2	1172	40.4	+34 16	7.7	7.7	B8	6	R	37377i	52	894	40.8	+12 29	7.9	7.9	B9	5	..	37602i
3	1017	40.4	+6 53	8.9	9.9	Ko	1	..	38412b	53	1049	40.8	+2 9	9.9	10.0	A2	2	..	39866b
4	1018	40.4	+6 35	8.8	9.2	F5	2	..	38412b	54	1274	40.8	-10 49	8.0	8.0	Ao	7	..	12770b
5	1008	40.4	+5 49	8.5	8.6	A2	5	..	38412b	55	1258	40.8	-12 29	7.6	8.6	Ko	3	..	18414b
6	1019	40.4	-1 39	8.4	9.0	Go	5	..	12754b	56	2525	40.8	-32 13	9.4	9.9	F8	1	..	44364b
7	1231	40.4	-17 18	9.1	9.7	Go	3	..	18522b	57	2109	40.8	-42 12	9.5	9.3	F5	3	..	20649b
8	1177	40.4	-18 8	9.1	9.7	Go	1	..	12632b	58	2131	40.8	-45 52	6.33	6.4	Fo	9	..	12756b
9	2204	40.4	-44 35	9.9	10.8	Go	1	..	20649b	59	1997	40.8	-47 52	8.5	9.7	Ko	3	..	12756b
10	1229	40.5	+51 0	8.6	8.6	B8	3	..	37366i	60	902	40.9	+60 32	8.9	9.3	F5	3	0,2	38154i
11	876	40.5	+10 45	8.3	8.6	Fo	3	..	38223i	61	947	40.9	+54 45	9.4	9.4	A	2	..	37366i
12	1019	40.5	+6 47	8.9	9.2	F2	2	..	38412b	62	950	40.9	+53 59	8.6	8.6	B9	4	..	37366i
13	1272	40.5	-10 1	8.61	8.61	Ao	2	..	12770b	63	887	40.9	+28 35	8.1	8.1	B9	3	..	37377i
14	1148	40.5	-15 17	8.6	9.4	G5	2	..	20485b	64	975	40.9	+25 49	8.6	8.7	A5	3	..	38084i
15	2424	40.5	-36 7	8.7	9.7	Ko	1	..	46181b	65	1093	40.9	+20 8	7.90	8.24	F2	5	..	38084i
16	..	40.5	-69 42	Neb.	Neb.	Pd	..	R	76,22	66	1218	40.9	-22 19	9.1	9.7	Go	2	..	17395b
17	365	40.5	-71 41	9.4	9.4	Ao	3	..	20540b	67	2447	40.9	-29 57	8.24	8.8	Go	3	..	12664b
18	1062	40.6	+56 54	8.8	10.0	K5	2	..	37407i	68	2132	40.9	-45 40	9.0	9.0	Ko	4	..	12756b
19	1016	40.6	+55 34	8.7	8.7	Ao	2	..	37366i	69	1998	40.9	-47 35	7.6	9.1	Ma	3	..	12756b
20	1000	40.6	+52 33	8.0	8.1	A3	5	1,4	37366i	70	1853	40.9	-49 33	9.3	9.6	F8	2	..	12756b
21	1091	40.6	+20 16	8.6	9.2	Go	1	..	38084i	71	1854	40.9	-49 53	7.60	7.6	B9	9	..	12756b
22	878	40.6	+10 3	8.97	8.95	B9	2	..	38223i	72	..	40.9	-69 27	..	..	O	..	R	76,28
23	1227	40.6	-16 2	8.6	8.7	A2	2	..	18522b	73	329	40.9	-75 30	8.8	9.4	Go	6	..	15162b
24	1175	40.6	-20 32	8.8	10.0	K5	3	..	17395b	74	194	40.9	-78 51	9.6	10.6	Ko	4	..	20652b
25	1251	40.6	-21 33	9.4	9.4	F5	3	..	17395b	75	497	41.0	+65 44	6.65	7.15	F8	6	..	36654i
26	1252	40.6	-21 42	6.68	6.2	B3	6	..	18557b	76	983	41.0	+21 37	8.8	9.1	F	2	..	38084i
27	1215	40.6	-22 54	9.1	9.5	F5	3	..	41088b	77	1095	41.0	+20 14	7.20	8.20	Ko	4	..	38084i
28	2430	40.6	-26 19	9.6	9.3	A	2	..	12664b	78	926	41.0	+15 47	5.91	5.86	B8	9	0,9	37568i
29	2588	40.6	-30 39	9.6	9.9	A5	2	..	14690b	79	1122	41.0	+1 30	8.3	9.3	Ko	7	..	12754b
30	2488	40.6	-35 31	8.7	9.2	F8	3	..	46181b	80	1152	41.0	-15 6	8.40	9.18	G5	3	..	20485b
31	2186	40.6	-38 22	8.7	9.5	Ko	2	..	46181b	81	1229	41.0	-15 59	9.1	9.1	A	3	..	12632b
32	2029	40.6	-41 22	10.4	10.4	G5	1	..	20649b	82	1177	41.0	-20 8	8.28	9.2	K5	3	..	17395b
33	2030	40.6	-41 50	10.0	9.0	Ao	5	..	20649b	83	2470	41.0	-27 44	9.0	9.2	A	2	..	12664b
34	2103	40.6	-42 13	9.7	9.5	F8	2	..	20649b	84	2450	41.0	-29 52	9.24	9.6	F5	2	..	44364b
35	2211	40.6	-44 41	9.0	10.5	K2	2	..	20649b	85	2698	41.0	-30 59	8.8	9.4	A3	3	..	14690b
36	..	40.6	-69 42	Neb.	Neb.	Pd	2	R	20540b	86	2526	41.0	-32 51	8.7	9.6	G5	2	..	14690b
37	..	40.6	-69 49	Neb.	Neb.	Pc	..	R	76,22	87	2055	41.0	-40 3	11.4	9.8	Go	3	..	20649b
38	324	40.7	+71 17	7.17	7.25	A3	5	..	37343i	88	2037	41.0	-41 9	8.0	9.5	K2	5	..	20649b
39	1112	40.7	+51 7	8.1	8.1	B8	5	..	37366i	89	478	41.0	-69 26	..	11.6	Pec.	..	..	76,31
40	1292	40.7	+38 8	9.4	9.4	A	1	..	38124i	90	1406	41.1	+49 31	8.6	9.6	Ko	1	..	37366i
41	1091	40.7	+31 37	7.37	7.37	Ao	5	..	37377i	91	997	41.1	+29 37	7.21	7.71	F8	6	..	37377i
42	1067	40.7	+19 53	9.00	8.95	B8	1	..	38084i	92	956	41.1	+24 37	9.0	9.1	A3	1	..	38084i
43	1010	40.7	+5 3	8.71	9.71	Ko	3	..	38412b	93	984	41.1	+21 50	8.4	9.0	Go	3	..	38084i
44	1217	40.7	-22 33	8.0	8.0	Ao	6	..	17395b	94	885	41.1	+10 53	7.64	8.71	K2	1	..	38412b
45	2433	40.7	-26 11	8.6	9.5	G5	1	..	12664b	95	1235	41.1	-4 18	6.42	7.42	Ko	6	0,7	37625i
46	2212	40.7	-44 29	9.1	10.2	Go	3	..	20649b	96	1387	41.1	-5 19	8.8	9.6	G5	2	..	20546b
47	450	40.7	-60 46	9.0	9.3	F8	1	..	38371b	97	1228	41.1	-14 49	8.51	9.07	Go	2	..	20485b
48	..	40.7	-69 27	..	..	Oa	..	..	76,28	98	3055	41.1	-23 40	8.4	9.2	Ko	4	..	41088b
49	1052	40.8	+46 40	7.10	8.10	Ko	3	0,3	37391i	99	2494	41.1	-35 27	9.0	9.1	A3	3	..	46181b
50	4 09	40.8	+29 23	8.0	8.0	B9	5	..	37377i	100	1904	41.1	-50 30	9.7	9.6	Go	2	..	12756b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

38500

5^h 41^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	913	41.2	+59 46	9.2	9.3	A2	2	..	38154i	51	1261	41.5	-19 19	9.6	9.2	Ao	4	..	17395b
2	1404	41.2	+42 1	8.6	8.6	Ao	2	..	37391i	52	2459	41.5	-29 57	8.99	9.4	Go	2	..	1469ob
3	1239	41.2	+35 7	6.60	7.16	Go	6	..	37377i	53	2531	41.5	-32 39	8.4	9.0	Ko	3	..	1469ob
4	1031	41.2	+22 29	8.2	9.2	Ko	3	..	38084i	54	2499	41.5	-35 50	9.0	9.7	G5	2	..	44364b
5	886	41.2	+11 0	7.81	8.59	G5	3	..	38223i	55	2155	41.5	-39 53	10.7	10.3	G5	2	..	20649b
6	1022	41.2	-1 34	9.3	9.3	Ao	3	..	12754b	56	1297	41.6	+38 25	8.8	9.6	G5	2	..	38124i
7	1236	41.2	-4 4	8.6	9.8	K5	4	..	18394b	57	961	41.6	+24 2	9.4	9.4	A	1	..	38084i
8	1154	41.2	-15 55	8.6	9.0	F5	4	..	20485b	58	1004	41.6	+17 42	5.51	5.79	Fo	9	..	37568i
9	3057	41.2	-23 52	8.0	8.5	Ko	5	..	41088b	59	896	41.6	+12 18	7.19	8.19	Ko	4	..	37602i
10	2472	41.2	-27 2	8.0	8.6	F8	4	..	12664b	60	955	41.6	+9 30	8.7	8.8	A3	3	..	38223i
11	506	41.2	-62 57	6.9	6.9	Ao	4	..	42853b	61	1007	41.6	+8 0	8.4	8.9	F8	2	..	39685b
12	491	41.2	-65 29	9.3	9.9	Go	3	..	38371b	62	1008	41.6	+7 32	8.3	9.1	G5	2	..	14071i
13	1232	41.3	+50 3	8.42	8.56	A5	3	2,2	37366i	63	1177	41.6	+0 2	Cl.	Cl.	Con.	2	R	12754b
14	1326	41.3	+37 58	8.4	8.7	Fo	3	..	38124i	64	1159	41.6	-15 17	9.1	9.1	Ao	3	..	12632b
15	1043	41.3	+23 51	8.4	9.5	K2	1	..	38084i	65	1158	41.6	-15 53	8.6	9.6	Ko	2	..	12632b
16	928	41.3	+15 48	8.7	8.7	Ao	1	..	37602i	66	1180	41.6	-20 33	10.0	9.7	Go	2	..	17395b
17	1005	41.3	+7 45	9.6	9.6	Ao	1	..	38412b	67	2480	41.6	-27 31	7.6	9.5	Ma	3	..	12664b
18	1232	41.3	-15 59	8.8	9.2	F5	4	5,1	12632b	68	1977	41.6	-46 15	8.9	9.7	Ko	1	..	12756b
19	2154	41.3	-39 13	8.7	9.8	K2	1	..	46181b	69	341	41.6	-76 43	10.0	10.3	Fo	4	..	15162b
20	1178	41.4	+45 12	8.0	8.3	Fo	3	..	37391i	70	786	41.7	+62 21	8.9	9.7	G5	2	..	38154i
21	..	41.4	+44 50	var.	var.	Pec.	..	R	M	71	1152	41.7	+33 15	8.6	8.6	B9	4	..	37377i
22	1176	41.4	+34 5	8.8	8.8	Ao	1	..	37377i	72	1014	41.7	+30 36	var.	var.	Na	..	R	M
23	867	41.4	+27 35	8.0	8.1	A3	3	..	37377i	73	1100	41.7	+20 54	8.0	8.3	F	5	R	38084i
24	978	41.4	+25 31	6.58	7.58	Ko	5	..	37377i	74	1100	41.7	+20 54	8.0	8.3	A	5	R	38084i
25	1032	41.4	+22 53	8.0	9.0	Ko	4	..	38084i	75	1167	41.7	-7 0	7.8	8.2	F5	6	..	18394b
26	953	41.4	+9 38	7.9	8.9	Ko	3	..	38223i	76	1160	41.7	-15 35	9.4	10.0	Go	2	..	12632b
27	954	41.4	+9 29	5.89	6.67	G5	7	..	14071i	77	1235	41.7	-16 0	9.1	10.1	Ko	2	..	12632b
28	1054	41.4	+2 40	7.9	7.9	Ao	3	..	14071i	78	1263	41.7	-19 27	9.4	9.1	Ao	4	..	17395b
29	1126	41.4	+1 9	6.14	6.92	G5	6	..	14071i	79	3068	41.7	-23 10	7.30	8.5	Ko	4	..	18557b
30	1081	41.4	-0 49	8.8	9.1	Fo	4	..	12754b	80	1860	41.7	-49 13	7.4	9.0	Ko	4	..	12756b
31	1237	41.4	-4 3	9.0	9.0	B9	5	0,2	18394b	81	158	41.7	-80 17	9.9	10.0	A2	3	..	20557b
32	1260	41.4	-12 28	7.8	9.0	K5	2	..	18414b	82	949	41.8	+54 1	9.7	9.7	Ao	2	..	37366i
33	1239	41.4	-13 15	8.6	9.1	F8	3	..	20485b	83	1015	41.8	+30 29	7.16	8.34	K5	4	..	37377i
34	1156	41.4	-15 20	9.6	9.6	A	2	..	12632b	84	963	41.8	+24 39	7.16	8.23	K2	5	3,4	38084i
35	1157	41.4	-15 51	9.1	9.7	Go	2	..	12632b	85	931	41.8	+15 41	8.3	9.3	Ko	2	..	37602i
36	2704	41.4	-31 42	6.77	7.3	F2	6	2,8	9861b	86	897	41.8	+12 36	8.3	8.3	B9	4	..	37602i
37	2040	41.4	-41 22	10.4	9.8	Go	3	..	20649b	87	899	41.8	+12 13	8.5	8.5	A	3	..	37602i
38	880	41.4	-54 51	8.58	8.9	Fo	5	..	20548b	88	1009	41.8	+7 28	8.9	9.0	A3	2	1,1-	39685b
39	475	41.4	-63 20	9.8	10.4	Go	2	..	38371b	89	1178	41.8	+0 55	8.64	8.92	Fo	4	..	12754b
40	..	41.4	-69 43	..	..	Pc	..	..	76,22	90	1082	41.8	-0 56	9.3	9.7	F5	1	..	12754b
41	190	41.4	-79 53	9.38	10.3	G5	2	..	20557b	91	1194	41.8	-3 18	9.4	9.5	A5	5	R	12754b
42	893	41.5	+28 45	8.7	8.7	B8	2	..	37377i	92	1213	41.8	-8 53	8.6	8.6	Ao	3	..	18394b
43	966	41.5	+18 41	8.1	9.1	Ko	2	..	38084i	93	1282	41.8	-11 4	8.0	9.2	K5	2	..	18414b
44	867	41.5	+16 32	8.4	9.4	Ko	3	E	37602i	94	1264	41.8	-12 51	9.1	9.5	F5	1	..	18414b
45	1025	41.5	+14 28	5.67	5.73	A2	8	0,9	37602i	95	1181	41.8	-18 43	9.0	9.6	Go	2	..	12632b
46	1056	41.5	+2 20	8.9	9.0	A3	4	..	39866b	96	2595	41.8	-30 34	8.8	9.3	A3	3	..	1469ob
47	1055	41.5	+2 12	8.4	8.4	Ao	3	..	39866b	97	2596	41.8	-30 57	8.8	8.7	A2	5	0,1	1469ob
48	1393	41.5	-5 22	9.1	9.1	Ao	4	..	20546b	98	2043	41.8	-41 57	9.6	10.1	G5	3	..	20649b
49	1212	41.5	-8 24	9.1	10.1	Ko	3	..	20546b	99	769	41.8	-52 5	9.0	10.5	Ko	2	5,1	15220b
50	1261	41.5	-12 19	8.6	8.9	Fo	3	..	20485b	100	446	41.8	-66 8	9.5	9.6	A2	3	..	38371b

THE HENRY DRAPER CATALOGUE.

38600

5^h 41^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	403	41.8	-72 31	9.0	10.1	K2	3	..	20540b	51	1231	42.2	- 9 53	7.91	8.98	K2	3	..	12770b
2	195	41.8	-78 52	6.14	6.1	B9	5	R	10820b	52	1184	42.2	-20 31	8.6	10.0	Ma	2	..	17395b
3	1418	41.9	+40 8	8.27	8.33	A2	3	..	38124i	53	2066	42.2	-40 33	10.7	10.4	Go	2	..	20649b
4	1416	41.9	+39 30	6.90	7.46	Go	3	..	37429i	54	419	42.2	-68 55	9.9	11.3	Ma	..	..	M
5	965	41.9	+24 37	8.0	9.0	K	..	..	56,234	55	499	42.3	+65 7	7.70	8.70	Ko	3	..	36654i
6	956	41.9	+ 9 43	8.9	10.0	K2	1	..	38412b	56	1418	42.3	+39 9	4.64	5.64	Ko	..	5,8R	56,81
7	1058	41.9	+ 2 35	8.9	9.9	Ko	2	..	39866b	57	1301	42.3	+38 19	8.6	9.7	K2	1	..	38124i
8	1023	41.9	- 1 42	9.3	9.3	A	3	..	12754b	58	902	42.3	+28 17	8.5	8.5	B8	3	R	37377i
9	1265	41.9	-12 46	8.0	8.0	B9	7	..	20485b	59	1016	42.3	+ 5 51	8.3	8.8	F8	5	..	38412b
10	2711	41.9	-31 33	7.6	8.7	Fo	5	0,1	14690b	60	1015	42.3	+ 5 39	8.9	9.9	Ko	2	..	38412b
11	2200	41.9	-38 43	8.7	9.8	K5	1	..	46181b	61	1036	42.3	+ 3 36	8.3	8.4	A5	3	..	38412b
12	2064	41.9	-40 14	7.55	8.4	Ko	8	..	20649b	62	1131	42.3	+ 1 25	9.1	9.1	B9	4	..	12754b
13	1982	41.9	-46 20	8.5	9.6	Ko	..	..	..	63	1238	42.3	- 4 31	9.1	9.7	Go	2	..	20546b
14	1983	41.9	-46 21	10.3	9.7	A2	3	R	15220b	64	1170	42.3	- 7 53	9.1	9.7	Go	2	..	20546b
15	456	41.9	-60 54	8.9	9.4	Ao	3	E	15147b	65	1266	42.3	-19 1	9.1	9.4	Ko	2	..	17395b
16	492	41.9	-67 27	7.1	7.1	Ao	7	2,4	42853b	66	2538	42.3	-32 20	5.20	5.01	B2	..	R	56,121
17	418	41.9	-68 49	8.0	9.2	K5	4	3,4	18485b	67	492	42.3	-65 10	8.7	9.7	Ko	4	E	15147b
18	1065	42.0	+56 53	6.38	6.44	A2	7	0,8	37366i	68	432	42.3	-70 24	10.0	10.6	G	4	..	15167b
19	1114	42.0	+51 20	8.2	9.2	Ko	3	..	37366i	69	500	42.4	+65 13	9.2	9.6	F5	3	..	38154i
20	1196	42.0	+47 50	8.5	8.9	F5	3	0,2	37366i	70	1105	42.4	+20 50	5.94	5.92	B9	8	R	38084i
21	1027	42.0	+14 59	7.99	8.13	A5	4	2,3-	38223i	71	1011	42.4	+17 28	8.5	8.5	Ao	3	..	37568i
22	979	42.0	+13 52	5.20	5.08	B5	10	3,10	37568i	72	902	42.4	+12 23	6.57	6.45	B5	..	4,7-	56,81
23	1072	42.0	+ 8 31	8.1	8.1	Ao	6	..	38412b	73	901	42.4	+12 2	8.5	8.8	Fo	4	0,3-	38223i
24	1060	42.0	+ 2 24	8.9	10.0	K2	3	..	39866b	74	1039	42.4	+ 4 48	8.30	9.37	K2	2	..	39866b
25	1129	42.0	+ 1 39	9.6	9.7	A3	1	..	39866b	75	1063	42.4	+ 2 52	8.2	9.4	K5	2	..	38412b
26	1026	42.0	- 1 24	8.9	9.0	A2	4	..	12754b	76	1398	42.4	- 5 38	8.0	9.0	Ko	7	..	20546b
27	1182	42.0	-18 21	9.1	9.2	A2	2	..	12632b	77	1279	42.4	-10 39	8.0	8.6	Go	4	..	12770b
28	3073	42.0	-23 41	7.03	8.2	Mb	5	0,7	18557b	78	1232	42.4	-14 52	3.67	3.73	A2	..	R	2492c
29	2469	42.0	-29 8	10.8	8.8	Ao	4	..	12664b	79	1260	42.4	-21 4	8.0	8.6	F5	6	..	17395b
30	2433	42.0	-34 14	9.0	10.0	Ko	1	..	44364b	80	2456	42.4	-26 24	8.4	8.6	A2	4	..	12664b
31	2048	42.0	-41 49	7.14	7.3	A3	9	..	20649b	81	2050	42.4	-41 8	9.0	8.9	A3	6	..	20649b
32	995	42.1	+21 1	8.6	9.6	Ko	2	..	38084i	82	772	42.4	-52 38	8.1	8.2	A5	5	..	24143b
33	1061	42.1	+ 2 29	8.9	10.0	K2	2	..	39866b	83	862	42.4	-55 44	7.8	8.3	F8	7	..	20548b
34	1062	42.1	+ 2 1	8.9	9.2	Fo	2	..	39866b	84	188	42.5	+79 59	9.04	9.54	F8	2	..	37558i
35	1196	42.1	- 3 23	9.4	9.4	Ao	4	..	12754b	85	788	42.5	+63 1	8.5	8.9	F5	2	..	36654i
36	1395	42.1	- 5 11	8.6	9.4	G5	5	..	20546b	86	1303	42.5	+38 42	7.36	8.43	K2	3	..	38124i
37	1257	42.1	-21 47	9.1	9.5	F8	2	..	41088b	87	1020	42.5	+30 40	8.6	8.9	Fo	3	..	37377i
38	1256	42.1	-21 53	9.1	9.4	F5	3	..	17395b	88	1004	42.5	+29 43	8.2	8.5	F2	3	..	37377i
39	2654	42.1	-25 54	9.0	9.6	Ko	2	..	45993b	89	874	42.5	+27 20	8.1	8.1	B8	4	..	37377i
40	2454	42.1	-26 39	8.1	9.5	K2	2	..	45993b	90	963	42.5	+26 1	9.4	9.4	Ao	2	..	38084i
41	2433	42.1	-36 55	9.4	9.1	A5	3	..	46181b	91	968	42.5	+24 30	8.6	8.6	Ao	4	..	38084i
42	2201	42.1	-38 23	10.0	9.5	A5	2	..	46181b	92	1060	42.5	+23 45	8.5	8.5	B9	3	..	38084i
43	2165	42.1	-39 21	7.00	7.6	A5	6	2,8-	20649b	93	1106	42.5	+20 48	8.6	8.6	A	..	..	56,234
44	2049	42.1	-41 23	10.7	10.1	G5	2	..	20649b	94	943	42.5	+11 3	8.4	8.4	Ao	4	..	38223i
45	412	42.2	+68 26	6.40	7.40	Ko	7	..	38112i	95	1014	42.5	+ 7 55	7.5	8.0	F8	3	..	14071i
46	410	42.2	+66 50	8.8	9.8	Ko	2	..	38112i	96	1037	42.5	+ 3 6	8.8	9.2	F5	2	..	39866b
47	916	42.2	+57 14	8.4	8.5	A3	3	..	37407i	97	1399	42.5	- 5 31	9.1	9.1	A	4	..	20546b
48	1409	42.2	+49 48	8.1	8.2	A2	5	2,4	37366i	98	1233	42.5	-14 31	8.6	8.6	Ao	3	..	18414b
49	1037	42.2	+ 4 18	8.4	9.4	Ko	2	..	38412b	99	1242	42.5	-16 41	7.6	8.6	Ko	3	..	20485b
50	1038	42.2	+ 4 3	7.54	7.52	B9	5	..	14071i	100	1261	42.5	-21 52	8.8	8.6	Go	5	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

38700

5^h 42^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1227	42.5	-22 40	9.4	9.5	Ko	3	..	17395b	51	970	42.9	+24 32	5.02	6.02	Ko	10	..	38084i
2	1228	42.5	-22 47	9.1	9.7	F8	2	..	17395b	52	1111	42.9	+20 59	9.4	9.4	Ao	2	..	38084i
3	2384	42.5	-37 5	8.7	9.5	Go	2	..	46181b	53	970	42.9	+18 12	7.22	7.56	F2	6	..	37568i
4	2068	42.5	-40 18	8.4	9.0	Ko	5	..	20649b	54	907	42.9	+12 33	8.5	8.5	Ao	3	..	38223i
5	2230	42.5	-44 59	9.68	9.7	Ao	2	..	12756b	55	1313	42.9	-6 29	7.6	7.6	B9	4	1,8	37625i
6	433	42.5	-70 4	9.8	11.2	Ma	3	..	15167b	56	1172	42.9	-7 26	8.6	9.4	G5	3	..	20546b
7	1264	42.6	+36 9	8.0	8.4	F5	2	..	38124i	57	1168	42.9	-15 17	7.04	7.02	B9	7	..	20485b
8	1005	42.6	+29 6	8.2	8.3	A2	2	..	37377i	58	1262	42.9	-21 35	7.9	9.4	Ma	5	0,4	17395b
9	1013	42.6	+17 23	7.5	7.5	B9	7	1,7	37602i	59	2665	42.9	-25 16	9.6	9.5	A5	3	..	45993b
10	1027	42.6	+6 25	5.27	5.35	A3	10	..	14071i	60	2664	42.9	-25 44	8.8	9.3	F8	3	..	45993b
11	1311	42.6	-6 25	9.0	9.6	Go	2	..	20546b	61	2014	42.9	-47 25	8.5	9.0	F5	4	..	12756b
12	1269	42.6	-12 51	7.72	9.07	Ma	3	..	20485b	62	508	42.9	-69 15	Cl.	Cl.	Con.	4	R	15167b
13	1244	42.6	-16 16	6.31	6.87	Go	8	..	20485b	63	344	42.9	-76 20	9.9	10.5	Go	3	E	20652b
14	1229	42.6	-22 53	9.1	9.5	Ko	3	..	17395b	64	905	43.0	+60 55	8.8	9.8	Ko	1	..	38154i
15	2532	42.6	-33 1	9.0	9.6	Ko	2	..	14690b	65	1117	43.0	+51 29	6.40	7.18	G5	7	5,7	37407i
16	2502	42.6	-35 26	9.0	11.2	K5	1	..	44364b	66	1199	43.0	+47 1	9.2	10.0	G5	1	..	38935i
17	2052	42.6	-41 26	9.6	9.8	Ko	2	..	20649b	67	1041	43.0	+3 52	7.70	8.20	F8	3	..	14071i
18	2234	42.6	-44 5	9.3	10.5	Ko	3	..	20649b	68	1136	43.0	+1 41	8.5	9.6	K2	3	..	12754b
19	928	42.6	-56 57	7.3	7.5	Ao	9	..	20548b	69	1137	43.0	+1 35	8.1	8.4	Fo	4	..	14071i
20	952	42.7	+54 0	8.9	8.9	Ao	3	..	37366i	70	1234	43.0	-9 33	7.80	8.80	Ko	2	..	12770b
21	1198	42.7	+47 16	8.9	9.5	G	1	..	37428i	71	1235	43.0	-9 42	2.20	1.96	Bo	..	R	2244c
22	1248	42.7	+35 57	8.2	8.7	F8	3	..	38124i	72	2447	43.0	-28 55	7.52	8.1	F5	7	..	12664b
23	1182	42.7	+34 11	8.2	9.0	G5	3	..	37377i	73	2023	43.0	-43 18	8.7	9.1	F2	7	..	20649b
24	1038	42.7	+3 55	8.9	9.0	A2	3	..	38412b	74	932	43.0	-56 45	8.8	9.5	Fo	3	..	20548b
25	1245	42.7	-13 5	8.6	8.7	A3	5	..	20485b	75	1411	43.1	+49 3	8.8	8.8	B8	3	..	37366i
26	1245	42.7	-16 27	9.1	9.9	G5	3	..	12632b	76	1200	43.1	+47 26	8.2	9.4	K5	2	5,1	37366i
27	420	42.7	-68 45	8.7	9.5	G5	2	5,2	18485b	77	1421	43.1	+39 32	8.0	8.0	Ao	2	..	38124i
28	405	42.7	-72 19	8.9	9.5	Go	4	..	20540b	78	1017	43.1	+7 51	8.3	8.4	A2	5	..	38412b
29	951	42.8	+54 39	8.6	9.8	K5	2	..	37366i	79	1016	43.1	+7 31	7.13	7.47	F2	5	..	14071b
30	1181	42.8	+45 3	8.07	8.07	Ao	3	..	37391i	80	1019	43.1	+5 26	9.6	9.7	A2	2	..	38412b
31	1305	42.8	+38 39	7.9	8.0	A5	2	..	37429i	81	1045	43.1	+4 43	10.3	10.4	A3	2	..	38412b
32	1043	42.8	+4 36	8.7	9.1	F5	2	..	38412b	82	1139	43.1	+1 17	8.9	9.2	Fo	3	..	39866b
33	1135	42.8	+1 42	9.1	9.6	F8	2	..	12754b	83	1138	43.1	+1 13	8.9	9.4	F8	1	..	39866b
34	1373	42.8	-2 20	8.0	9.0	Ko	8	..	12754b	84	1086	43.1	-0 47	8.4	9.4	Ko	4	..	12754b
35	1281	42.8	-10 34	6.00	6.08	A3	..	1,8	56,81	85	1201	43.1	-3 13	9.1	10.1	K	1	..	12754b
36	1167	42.8	-15 29	8.8	9.2	F5	3	..	12632b	86	1402	43.1	-5 43	9.8	10.4	Go	2	..	20546b
37	1248	42.8	-16 9	9.1	9.5	F5	3	..	12632b	87	3430	43.1	-24 31	9.3	8.6	F2	4	R	18557b
38	1187	42.8	-18 13	8.2	8.2	B9	6	..	18522b	88	3429	43.1	-24 32	9.1	8.6	F2	4	R	18557b
39	3083	42.8	-23 2	9.4	9.2	Ko	3	..	17395b	89	2466	43.1	-26 18	8.2	8.6	Go	3	..	12664b
40	2386	42.8	-37 52	9.4	9.7	G5	2	..	46181b	90	2073	43.1	-40 51	10.7	10.3	F5	1	..	20649b
41	2070	42.8	-40 19	11.4	10.3	Go	1	..	20649b	91	2025	43.1	-43 34	9.9	10.8	F5	2	..	20649b
42	2071	42.8	-40 55	9.6	11.0	Go	2	..	20649b	92	2017	43.1	-47 2	7.6	7.2	Fo	7	..	12756b
43	1918	42.8	-50 14	8.5	9.0	Go	4	..	12756b	93	1022	43.2	+55 14	8.0	8.0	Ao	5	0,4	37407i
44	1919	42.8	-50 53	10.1	9.3	Ao	3	..	24143b	94	955	43.2	+53 24	9.0	9.5	F8	2	..	37366i
45	1608	42.8	-50 59	9.0	9.3	F2	3	..	24143b	95	1424	43.2	+40 4	8.12	8.20	A3	3	2,3	37391i
46	496	42.8	-67 10	7.7	8.2	F8	4	0,3	24561b	96	1003	43.2	+21 6	7.17	7.15	B9	6	..	38084i
47	953	42.9	+53 27	9.2	9.6	F5	1	..	37366i	97	945	43.2	+11 57	6.90	6.85	B8	..	1,6	37568i
48	954	42.9	+53 10	9.0	10.2	K5	2	..	37366i	98	1046	43.2	+4 40	7.15	7.15	Ao	7	..	14071i
49	1009	42.9	+29 41	7.76	7.90	A5	4	..	37377i	99	1088	43.2	-0 42	8.9	9.2	F2	2	..	12754b
50	991	42.9	+25 36	7.6	8.6	Ko	3	..	38084i	100	1314	43.2	-6 10	8.6	8.6	B8	6	1,2	20546b

THE HENRY DRAPER CATALOGUE.

38800

5^h 43^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1218	43.2	- 8 21	8.07	9.07	Ko	3	..	20546b	51	1333	43.6	+37 27	8.40	9.40	Ko	2	..	38124i
2	1271	43.2	-19 2	9.0	9.8	Ko	2	..	12632b	52	1024	43.6	+30 31	8.8	8.7	B5	4	..	37388i
3	1185	43.2	-20 17	10.0	9.7	Ao	2	..	17395b	53	1008	43.6	+21 47	8.6	8.6	Ao	3	..	38084i
4	2449	43.2	-28 40	6.05	6.1	B8	7	..	18557b	54	1019	43.6	+17 29	8.7	8.7	Ao	2	..	37568i
5	2445	43.2	-36 16	6.84	7.3	Ao	8	0,9	9061b	55	910	43.6	+12 7	8.1	8.2	A2	3	1,3	37602i
6	493	43.2	-65 46	9.6	9.6	Ao	4	..	38371b	56	1184	43.6	+ 0 42	7.20	7.15	B8	10	..	12754b
7	880	43.3	+27 31	7.29	8.29	Ko	..	5,3	56,81	57	1183	43.6	+ 0 38	9.3	9.3	Ao	2	..	12754b
8	973	43.3	+24 12	8.0	9.0	Ko	3	..	38084i	58	1244	43.6	- 4 7	5.95	6.73	G5	8	..	37625i
9	1018	43.3	+ 7 51	7.9	8.9	Ko	4	..	38412b	59	1405	43.6	- 5 23	9.0	9.6	Go	3	..	20546b
10	1064	43.3	+ 2 16	8.7	9.7	Ko	5	..	12754b	60	1173	43.6	- 7 13	9.1	9.7	Go	2	..	20546b
11	1243	43.3	- 4 51	9.50	10.28	G5	2	..	20546b	61	439	43.6	-70 25	9.7	10.5	G5	6	..	15167b
12	1249	43.3	-13 33	8.0	9.1	K2	1	..	18414b	62	551	43.7	+64 58	8.70	8.84	A5	2	..	36654i
13	2537	43.3	-33 47	9.4	9.6	Fo	2	..	14690b	63	1188	43.7	+34 55	8.97	9.03	A2	2	..	38124i
14	2444	43.3	-34 56	8.75	9.9	Ko	1	..	12665b	64	1102	43.7	+32 8	9.0	10.0	Ko	1	..	37377i
15	2506	43.3	-35 40	9.1	10.4	F8	2	..	44364b	65	988	43.7	+13 53	8.5	8.5	Ao	2	..	37602i
16	2179	43.3	-39 15	9.0	8.7	Fo	4	0,4-	20649b	66	1031	43.7	- 1 32	7.5	7.6	A5	4	5,10	37625i
17	1362	43.4	+43 59	7.45	7.51	A2	5	..	37391i	67	1030	43.7	- 1 49	7.17	8.24	K2	8	..	12754b
18	1415	43.4	+42 57	8.6	9.0	F5	2	..	38935i	68	1406	43.7	- 5 52	8.6	8.6	Ao	7	0,2	20546b
19	1111	43.4	+31 45	6.72	6.80	A3	5	..	37377i	69	1252	43.7	-16 50	10.0	10.1	A2	2	..	12632b
20	1018	43.4	+17 43	8.9	8.9	Ao	3	..	37602i	70	3102	43.7	-23 50	10.3	9.7	Go	1	..	17395b
21	909	43.4	+12 27	8.3	8.3	Ao	3	..	37602i	71	1999	43.7	-46 38	5.13	7.2	Ko	..	..	56,121
22	1065	43.4	+ 2 49	9.3	9.9	Go	2	..	39866b	72	778	43.7	-52 46	8.3	8.8	A3	5	..	24143b
23	1089	43.4	- 0 48	7.7	7.8	A5	5	2,3-	39866b	73	866	43.7	-55 37	7.1	7.5	Fo	8	..	20548b
24	1219	43.4	- 8 25	7.12	7.10	B9	4	1,6-	37625i	74	193	43.7	-79 58	8.48	8.5	A2	7	2,8	20557b
25	3098	43.4	-23 55	10.8	10.0	Ko	1	..	45993b	75	159	43.7	-80 54	8.39	9.7	Ko	5	..	20557b
26	3431	43.4	-24 4	9.3	9.3	G5	2	..	12664b	76	1104	43.8	+32 51	9.0	9.1	A3	2	..	37377i
27	2504	43.4	-27 10	7.22	8.0	F8	7	..	18557b	77	1050	43.8	+22 57	9.1	9.1	A	2	R	38084i
28	2391	43.4	-37 22	9.3	10.5	Go	2	..	46181b	78	911	43.8	+12 53	8.4	9.4	Ko	2	..	38223i
29	864	43.4	-55 45	8.4	8.3	F5	6	..	20548b	79	1043	43.8	+ 3 59	8.8	8.8	Ao	3	..	38412b
30	345	43.4	-76 4	10.4	10.5	A2	3	..	15162b	80	1091	43.8	- 0 42	8.3	8.7	F5	4	..	12754b
31	863	43.5	+58 55	6.06	6.04	B9	9	1,10	37408i	81	1223	43.8	- 8 57	8.6	9.2	Go	6	..	20546b
32	1054	43.5	+46 16	8.6	8.6	Ao	2	..	37391i	82	1188	43.8	-20 3	8.23	8.8	Fo	6	..	17395b
33	1048	43.5	+22 42	9.0	9.1	A2	2	..	38084i	83	1232	43.8	-22 45	9.0	9.8	Ko	2	..	17395b
34	1007	43.5	+21 16	9.4	10.5	K2	1	..	38084i	84	2738	43.8	-31 20	8.0	8.4	Fo	3	..	14690b
35	973	43.5	+18 35	7.6	7.9	Fo	5	..	37568i	85	2509	43.8	-35 42	6.38	7.6	Ko	7	..	12665b
36	1033	43.5	+14 51	8.9	8.9	A	2	..	37568i	86	2187	43.8	-39 8	9.3	9.5	Ko	1	..	46181b
37	1034	43.5	+14 3	8.4	8.4	B9	3	..	37568i	87	2061	43.8	-41 26	10.4	10.3	A2	2	..	20649b
38	1140	43.5	+ 2 0	8.9	9.9	Ko	3	..	12754b	88	2142	43.8	-42 11	8.7	9.5	Ko	3	..	20649b
39	1404	43.5	- 5 23	9.8	10.4	Go	2	..	20546b	89	1972	43.8	-48 0	9.0	9.6	F5	2	..	12756b
40	1317	43.5	- 6 41	8.0	8.1	A5	6	0,2	20546b	90	1879	43.8	-49 19	8.1	9.6	G5	3	..	12756b
41	1251	43.5	-13 11	9.1	9.1	Ao	1	..	18414b	91	1927	43.8	-50 54	8.6	9.0	Ko	3	..	12756b
42	1190	43.5	-18 39	9.0	9.4	F5	2	..	12632b	92	512	43.8	-61 49	9.1	10.1	A2	3	E	15147b
43	1267	43.5	-21 9	8.8	9.4	K2	3	..	17395b	93	495	43.8	-65 8	9.3	9.9	Go	2	..	38371b
44	2075	43.5	-40 47	10.0	9.2	F8	3	..	20649b	94	428	43.8	-68 37	9.1	9.7	Go	2	5,1	18485b
45	2058	43.5	-41 2	10.2	10.4	Go	2	..	20649b	95	612	43.9	+63 26	9.0	9.0	Ao	4	..	38154i
46	776	43.5	-52 43	8.6	9.1	A3	4	..	24143b	96	957	43.9	+53 47	9.2	9.6	F5	3	0,2	37366i
47	112	43.6	+84 59	8.78	9.34	G	2	..	37546i	97	1414	43.9	+49 19	8.6	8.9	Fo	4	..	37366i
48	1311	43.6	+48 35	8.0	8.1	A5	3	2,2	37366i	98	1051	43.9	+22 56	8.6	8.7	A2	4	..	38084i
49	1296	43.6	+44 55	8.67	9.67	Ko	1	..	38935i	99	912	43.9	+12 37	4.92	4.90	B9	..	..	56,81
50	1364	43.6	+43 39	8.0	8.0	B9	3	..	37391i	100	1048	43.9	+ 4 10	7.9	7.9	B9	5	..	14071i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

38900

5^h 43^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1045	43.9	+ 3 37	8.2	8.3	A2	4	..	38412b	51	2544	44.2	-33 27	9.4	9.3	F2	2	..	1469ob
2	1240	43.9	- 9 53	8.71	9.21	F8	2	..	18394b	52	2219	44.2	-38 2	8.1	8.6	Ao	4	2,3	12665b
3	1291	43.9	-11 23	8.6	9.0	F5	2	..	20485b	53	2065	44.2	-41 12	9.4	9.0	Ao	6	..	20649b
4	1253	43.9	-13 24	7.42	8.42	Ko	5	..	20485b	54	2038	44.2	-43 9	9.2	9.9	Go	3	..	20649b
5	2078	43.9	-40 55	9.4	9.8	Go	3	..	20649b	55	1979	44.2	-48 25	8.4	8.0	F2	5	..	12756b
6	2034	43.9	-43 15	9.0	10.2	G5	3	..	20649b	56	936	44.2	-56 29	9.0	9.2	F2	4	..	20548b
7	2245	43.9	-44 10	9.3	9.7	Ao	6	..	20649b	57	328	44.2	-73 27	9.7	10.1	F5	3	..	15167b
8	2156	43.9	-45 25	9.0	8.7	F5	3	..	12756b	58	1003	44.3	+52 9	9.0	9.3	Fo	2	..	37366i
9	1115	44.0	+31 2	8.0	7.9	B5	5	..	37377i	59	1183	44.3	+45 16	8.6	8.7	A2	2	..	38935i
10	1052	44.0	+22 31	8.6	9.7	K2	1	..	38084i	60	1089	44.3	+19 9	7.8	7.9	A5	3	..	38084i
11	1049	44.0	+ 4 19	8.5	8.5	Ao	5	..	38412b	61	945	44.3	+15 58	8.9	8.9	B9	4	..	37568i
12	1143	44.0	+ 1 26	9.9	9.9	B8	2	..	12754b	62	947	44.3	+15 38	9.3	9.3	A	1	..	37568i
13	1092	44.0	- 0 45	10.3	10.4	A5	3	..	12754b	63	1037	44.3	+14 51	8.4	8.4	B9	3	..	37568i
14	1032	44.0	- 1 56	8.77	8.83	A2	6	..	12754b	64	916	44.3	+12 15	8.7	9.0	Fo	1	..	38223i
15	1204	44.0	- 3 20	9.1	9.4	Fo	1	..	12754b	65	1080	44.3	+ 8 28	9.1	9.5	F5	1	..	38223i
16	1410	44.0	- 5 31	8.8	8.8	Ao	5	..	20546b	66	1225	44.3	- 8 26	9.1	9.4	F2	4	..	20546b
17	1409	44.0	- 5 48	9.1	9.7	Go	3	..	20546b	67	1191	44.3	-20 40	8.4	9.1	Fo	5	..	17395b
18	1285	44.0	-10 18	8.6	8.9	F2	4	..	18394b	68	1192	44.3	-20 45	10.0	9.8	Ao	2	..	17395b
19	3440	44.0	-24 2	10.8	9.8	F5	1	..	17395b	69	1235	44.3	-22 32	9.0	8.9	Ao	5	..	17395b
20	2456	44.0	-36 31	7.10	8.7	K2	5	..	12665b	70	2480	44.3	-26 10	8.6	9.8	K5	2	..	45993b
21	2217	44.0	-38 15	7.6	7.3	Ao	7	0,8	9061b	71	2459	44.3	-36 41	8.0	9.4	Ko	2	..	12665b
22	430	44.0	-68 30	10.2	11.6	Ma	..	..	M	72	2042	44.3	-43 49	10.1	10.5	F8	3	..	20649b
23	160	44.0	-80 24	9.4	9.8	F5	4	..	20557b	73	933	44.3	-53 15	6.62	7.3	Go	10	..	24143b
24	831	44.1	+61 39	7.9	8.0	A2	4	E	37407i	74	470	44.3	-60 45	8.7	8.8	Ao	2	..	20516b
25	1073	44.1	+56 3	8.6	9.4	G5	2	..	37407i	75	408	44.3	-72 11	10.0	10.6	Go	2	..	15167b
26	897	44.1	+10 40	7.9	8.2	F2	4	..	38223i	76	302	44.4	+73 11	8.2	8.8	Go	2	..	37343i
27	1033	44.1	+ 6 52	8.7	9.1	F5	3	..	38412b	77	1239	44.4	+50 24	9.2	9.3	A2	2	..	37366i
28	1185	44.1	+ 0 10	9.9	10.0	A3	2	..	12754b	78	1107	44.4	+32 10	8.5	8.5	B9	3	..	37377i
29	1034	44.1	- 1 27	9.3	9.7	F5	1	..	12754b	79	1027	44.4	+30 41	9.4	9.3	B5	2	..	37377i
30	1033	44.1	- 1 47	8.3	9.1	G5	5	..	12754b	80	886	44.4	+27 28	7.14	7.56	F5	..	3,5	56,81
31	1243	44.1	-14 20	6.88	7.66	G5	7	..	20485b	81	982	44.4	+18 30	8.3	8.4	A2	2	..	37568i
32	1194	44.1	-18 44	8.7	8.7	Ao	6	0,6	12632b	82	949	44.4	+11 42	8.5	9.3	G5	1	..	38223i
33	1276	44.1	-19 3	9.1	8.9	Ao	5	..	17395b	83	1035	44.4	+ 6 2	8.8	8.8	Ao	2	..	38412b
34	1271	44.1	-21 51	9.4	9.5	F5	2	..	17395b	84	1259	44.4	-16 38	8.8	9.3	F8	4	..	12632b
35	1234	44.1	-22 5	8.0	8.9	K2	6	..	17395b	85	3110	44.4	-23 1	9.8	9.2	F8	2	..	17395b
36	2396	44.1	-37 47	8.7	9.6	Go	3	..	46181b	86	2453	44.4	-34 30	7.6	9.0	Ko	3	..	12665b
37	2079	44.1	-40 21	8.4	9.2	Ko	5	..	20649b	87	2462	44.4	-36 34	10.0	9.9	A3	3	..	46181b
38	2037	44.1	-43 41	9.5	10.5	Ko	3	..	20649b	88	2080	44.4	-40 40	10.9	9.8	G5	3	..	20649b
39	2247	44.1	-44 50	7.98	8.0	A2	6	..	12756b	89	2066	44.4	-41 37	7.0	8.3	Ma	8	..	20649b
40	2160	44.1	-45 41	7.7	8.0	F5	6	..	12756b	90	2040	44.4	-43 10	9.2	10.2	G5	2	..	20649b
41	498	44.1	-67 44	9.5	10.9	Mb	..	..	M	91	1933	44.4	-50 53	8.5	8.5	A2	7	..	12756b
42	431	44.1	-68 7	7.9	8.9	Ko	7	0,4	18485b	92	512	44.4	-62 57	8.9	9.0	A3	5	E	15147b
43	1418	44.2	+42 4	8.6	8.6	A	2	..	38935i	93	442	44.4	-70 29	9.8	10.9	K2	1	..	15167b
44	1336	44.2	+37 16	4.99	6.34	Ma	..	0,7 R	774c	94	348	44.4	-76 25	10.0	10.6	G	2	E	20652b
45	1081	44.2	+ 8 3	8.9	9.2	F2	2	..	38223i	95	613	44.5	+63 13	9.9	10.0	A2	2	..	38154i
46	1050	44.2	+ 4 33	9.6	9.6	B9	1	..	38412b	96	952	44.5	+54 19	9.4	9.8	F5	2	..	37407i
47	1243	44.2	- 9 42	8.8	9.2	F5	3	..	18394b	97	1119	44.5	+31 35	8.4	9.6	K5	..	..	M
48	1276	44.2	-12 22	8.4	9.6	K5	1	..	18414b	98	887	44.5	+27 39	7.7	9.1	Ma	2	..	37377i
49	3443	44.2	-24 29	8.0	8.6	Go	3	..	18557b	99	980	44.5	+24 6	9.0	9.1	A5	1	..	38084i
50	2627	44.2	-30 57	8.8	9.3	F5	2	..	1469ob	100	1095	44.5	- 0 43	7.7	7.7	Ao	10	..	12754b

THE HENRY DRAPER CATALOGUE.

39000

5^h 44^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1244	44.5	- 9 26	8.6	9.0	F5	3	..	18394b	51	1052	44.9	+ 4 24	6.12	7.12	Ko	7	..	14071i
2	2518	44.5	-35 21	8.29	9.3	Ko	2	..	12665b	52	1048	44.9	+ 3 14	8.3	8.6	Fo	3	..	38412b
3	1429	44.6	+39 7	4.18	5.18	Ko	..	5,9 R	56,81	53	1070	44.9	+ 2 27	8.9	10.1	K5	1	..	38412b
4	888	44.6	+27 56	5.65	6.65	Ko	..	0,7	56,81	54	1281	44.9	-12 15	8.0	9.2	K5	1	..	18414b
5	975	44.6	+26 1	7.8	7.9	A3	5	..	37377i	55	1278	44.9	-19 26	7.26	7.9	Ao	10	..	17395b
6	1128	44.6	+20 25	9.0	9.1	A2	3	..	38084i	56	1273	44.9	-21 26	10.0	9.8	Go	1	..	17395b
7	978	44.6	+ 9 51	5.89	6.67	G5	7	..	14071i	57	2756	44.9	-31 38	8.8	9.6	F5	2	..	44364b
8	1097	44.6	- 0 23	7.43	8.50	K2	7	..	12754b	58	2049	44.9	-43 55	10.1	11.1	K2	2	..	20649b
9	1322	44.6	- 6 38	9.1	9.7	Go	2	..	20546b	59	1984	44.9	-48 10	8.9	8.7	Ao	4	..	12756b
10	1175	44.6	-14 59	9.11	9.45	F2	2	..	12632b	60	1620	44.9	-51 6	3.94	4.02	A3	..	R	28,198
11	3448	44.6	-24 10	9.1	9.8	K2	2	..	17395b	61	560	44.9	-58 48	8.7	9.2	F2	4	..	18484b
12	2083	44.6	-40 5	9.6	9.0	G5	4	..	20649b	62	517	44.9	-61 15	7.4	9.2	Ko	6	..	15147b
13	870	44.6	-55 58	8.1	8.6	Fo	7	..	20548b	63	405	45.0	+67 32	8.4	8.5	A3	3	..	38112i
14	496	44.6	-65 46	4.52	4.66	A5	..	0, R	28,198	64	1206	45.0	+47 24	8.6	9.4	G5	2	..	37366i
15	443	44.6	-70 6	10.0	10.3	Fo	4	..	15167b	65	1430	45.0	+39 32	7.82	7.88	A2	3	0,1	38124i
16	198	44.6	-78 41	9.6	10.6	Ko	4	..	20652b	66	918	45.0	+12 29	8.9	9.2	Fo	1	..	38223i
17	1240	44.7	+50 45	8.6	9.4	G5	3	..	37366i	67	1071	45.0	+ 2 23	8.9	9.0	A2	3	..	38412b
18	1029	44.7	+18 0	7.5	7.5	B9	6	0,6	37568i	68	1146	45.0	+ 1 21	8.9	9.7	G5	2	..	12754b
19	1041	44.7	+14 16	5.71	6.71	Ko	..	5,8-	56,81	69	1245	45.0	- 9 47	9.1	9.2	A2	2	..	12770b
20	1084	44.7	+ 8 6	8.7	9.9	K5	1	..	38412b	70	1251	45.0	-14 30	5.57	6.35	G5	10	..	20485b
21	1026	44.7	+ 5 55	8.9	9.0	A3	2	..	38412b	71	1253	45.0	-17 37	8.6	9.6	Ko	4	..	12632b
22	1251	44.7	- 4 29	8.6	9.4	G5	4	..	20546b	72	3453	45.0	-24 5	10.5	9.6	Ao	3	..	45993b
23	1323	44.7	- 6 13	8.6	8.9	Fo	4	..	20546b	73	2075	45.0	-41 5	10.4	9.9	F8	2	..	20649b
24	1182	44.7	- 7 1	8.6	9.4	G5	4	..	20546b	74	329	45.0	-73 17	10.2	10.6	F5	2	..	15167b
25	1196	44.7	-18 5	8.6	9.7	K2	4	..	12632b	75	1024	45.1	+55 21	8.9	10.1	K5	1	..	37408i
26	2690	44.7	-25 9	9.05	9.5	Go	3	..	12664b	76	1433	45.1	+40 56	7.8	8.3	F8	3	..	37429i
27	2547	44.7	-33 27	6.92	8.5	K2	5	..	14690b	77	1032	45.1	+30 30	9.0	9.0	A	2	..	37377i
28	2084	44.7	-40 24	10.4	9.5	G5	4	..	20649b	78	1083	45.1	+23 54	9.0	9.0	Ao	4	..	38084i
29	918	44.8	+57 56	7.18	8.25	K2	4	..	37407i	79	903	45.1	+10 30	8.7	8.8	A2	3	..	38223i
30	1131	44.8	+20 38	8.4	9.4	Ko	3	..	38084i	80	1087	45.1	+ 8 11	8.9	8.9	B9	3	1,2	38412b
31	949	44.8	+15 29	8.9	9.3	F5	2	..	37568i	81	1024	45.1	+ 7 6	9.6	10.1	F8	2	..	38412b
32	996	44.8	+13 21	8.9	8.9	B9	2	..	38223i	82	1054	45.1	+ 4 55	7.50	7.48	B9	6	..	14071i
33	1187	44.8	+ 0 7	7.68	7.66	B9	7	..	12754b	83	1416	45.1	- 5 23	9.4	9.8	F5	3	..	20546b
34	1098	44.8	- 0 13	9.3	9.3	Ao	3	..	12754b	84	1177	45.1	-15 29	9.4	10.2	G5	2	..	12632b
35	1280	44.8	-12 35	8.6	8.6	Ao	2	..	20485b	85	1263	45.1	-16 32	9.0	9.1	A3	6	..	12632b
36	1193	44.8	-20 8	8.28	9.1	Ko	5	..	17395b	86	2569	45.1	-32 27	7.47	8.4	G5	4	..	14690b
37	1238	44.8	-22 5	8.2	9.1	Ko	5	..	17395b	87	2552	45.1	-33 54	9.6	9.9	F5	2	..	44364b
38	3120	44.8	-23 50	8.6	8.2	F8	2	..	18557b	88	2089	45.1	-40 14	10.0	9.9	Go	3	..	20649b
39	2459	44.8	-34 58	7.44	8.4	Ko	4	..	12665b	89	2051	45.1	-43 9	10.1	11.1	Ko	1	..	20649b
40	2085	44.8	-40 41	6.48	8.0	Ko	9	..	20649b	90	1621	45.1	-51 45	9.2	9.9	Go	3	2,1-	15220b
41	2167	44.8	-45 2	9.52	10.5	Ko	1	..	12756b	91	161	45.1	-80 34	5.65	6.5	G5	..	5, R	56,121
42	1985	44.8	-48 47	8.1	8.1	F2	5	..	12756b	92	866	45.2	+58 59	9.0	10.1	K2	1	..	37408i
43	1004	44.9	+52 46	8.6	8.6	Ao	4	0,3	37366i	93	1423	45.2	+42 14	8.5	9.3	G5	3	..	37429i
44	1060	44.9	+46 46	7.68	8.68	Ko	3	5,2	37366i	94	1340	45.2	+37 49	8.0	8.8	G5	3	..	38124i
45	1109	44.9	+32 6	6.41	7.76	Ma	5	..	37377i	95	1172	45.2	+33 35	8.7	9.5	G5	2	..	37377i
46	1123	44.9	+31 19	9.4	9.5	A2	2	..	37377i	96	918	45.2	+28 4	8.1	8.1	Ao	3	..	37377i
47	1005	44.9	+25 12	9.1	9.5	F5	1	..	38084i	97	987	45.2	+18 32	6.95	7.95	Ko	4	..	37568i
48	1059	44.9	+22 29	8.5	8.5	B9	4	..	38084i	98	1047	45.2	+14 25	6.61	6.59	B9	..	1,8	56,81
49	1132	44.9	+20 8	8.45	8.45	Ao	3	..	38084i	99	1048	45.2	+14 1	6.79	7.57	G5	5	..	37568i
50	1028	44.9	+ 5 54	8.9	9.3	F5	1	R	38412b	100	919	45.2	+12 5	8.8	9.1	Fo	2	..	38223i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39100

5^h 45^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	904	45.2	+10 24	8.9	8.9	Ao	2	..	38223i	51	868	45.5	+58 13	8.6	8.6	Ao	3	..	37407i
2	1051	45.2	+3 10	7.9	9.1	K5	2	..	38412b	52	1303	45.5	+44 22	7.9	8.9	Ko	3	..	37391i
3	1147	45.2	+1 44	8.9	8.9	B8	3	..	12754b	53	1373	45.5	+43 55	8.7	8.7	Ao	2	..	38935i
4	1417	45.2	-5 56	8.0	8.8	G5	4	..	20546b	54	1435	45.5	+40 7	8.52	9.08	Go	2	..	37429i
5	3456	45.2	-24 18	8.2	9.2	Ko	3	..	12664b	55	1085	45.5	+23 12	8.2	8.2	Ao	4	..	38084i
6	3458	45.2	-24 29	8.8	9.0	Go	3	..	12664b	56	953	45.5	+11 28	6.91	7.69	G5	5	..	37568i
7	3455	45.2	-24 56	8.90	9.2	F2	3	..	12664b	57	954	45.5	+11 2	8.4	9.4	Ko	1	..	38223i
8	2526	45.2	-35 51	8.7	10.2	Ko	3	..	46181b	58	982	45.5	+9 51	9.6	10.4	G5	3	..	38412b
9	2226	45.2	-38 10	10.7	9.8	A2	1	..	46181b	59	1386	45.5	-2 6	9.1	10.1	Ko	2	..	12754b
10	892	45.2	-54 23	5.96	7.8	K5	..	5.9	56,121	60	1208	45.5	-3 11	8.8	9.3	F8	4	..	12754b
11	519	45.2	-61 11	10.0	10.0	Ao	2	..	15147b	61	1419	45.5	-5 0	8.80	8.80	Ao	5	..	20546b
12	348	45.2	-74 31	9.3	9.7	F5	3	..	15162b	62	1182	45.5	-15 29	8.4	8.8	F5	4	..	20485b
13	1241	45.3	+50 16	8.4	9.4	Ko	2	..	37366i	63	2759	45.5	-31 7	8.0	9.4	A5	4	..	14690b
14	1318	45.3	+38 32	6.82	6.77	B8	4	..	37429i	64	41	45.6	+87 20	8.64	9.64	Ko	3	..	37546i
15	1033	45.3	+30 56	7.36	7.36	Ao	5	..	37377i	65	553	45.6	+64 17	8.6	9.6	Ko	4	..	38154i
16	1034	45.3	+30 43	8.2	8.6	F5	3	..	37377i	66	1077	45.6	+57 1	7.8	8.1	Fo	5	..	37407i
17	1031	45.3	+17 49	8.2	8.7	F8	4	..	37568i	67	1065	45.6	+22 53	7.8	8.8	Ko	3	..	38084i
18	1148	45.3	+2 0	6.26	6.82	Go	4	R	14071i	68	990	45.6	+18 23	7.08	7.86	G5	5	..	37568i
19	1148	45.3	+2 0	6.26	6.82	Ao	4	R	14071i	69	1038	45.6	-1 27	7.9	8.7	G5	4	5.3	12754b
20	1200	45.3	-20 45	9.6	10.0	A2	1	..	17395b	70	1039	45.6	-1 27	8.9	9.2	Fo	1	..	39866b
21	1275	45.3	-21 42	9.4	9.4	Ao	4	..	17395b	71	1204	45.6	-18 42	9.1	10.1	Ko	2	..	12632b
22	2494	45.3	-26 44	9.4	9.8	K2	2	..	45993b	72	1203	45.6	-20 23	8.0	9.2	Ko	4	..	17395b
23	2757	45.3	-31 43	7.65	8.4	F2	6	2.3	14690b	73	1276	45.6	-21 39	9.1	9.5	F5	3	..	17395b
24	2572	45.3	-32 3	8.7	9.4	Ko	2	..	14690b	74	2497	45.6	-26 22	7.9	8.3	Ao	5	..	12664b
25	2197	45.3	-39 18	9.0	9.8	K2	1	2.2	46181b	75	2519	45.6	-29 9	9.77	10.2	Ao	2	..	44364b
26	2198	45.3	-39 58	9.20	9.3	G5	4	..	20649b	76	2518	45.6	-29 35	8.0	9.4	Ko	3	..	12664b
27	1986	45.3	-48 31	9.0	8.7	A2	4	..	12756b	77	1991	45.6	-48 57	7.0	6.9	Ao	10	..	12756b
28	1941	45.3	-50 4	9.24	9.2	G5	2	0.2	24143b	78	874	45.6	-55 4	8.78	8.7	A2	4	..	24143b
29	893	45.3	-54 1	8.4	8.6	B9	5	..	24143b	79	111	45.6	-83 56	9.1	9.6	F8	3	..	20557b
30	894	45.3	-54 52	9.18	9.2	F8	3	..	24143b	80	1006	45.7	+52 37	8.6	9.4	G5	2	..	37366i
31	871	45.3	-55 36	9.2	9.6	Ao	2	..	20548b	81	1186	45.7	+45 22	9.4	9.5	A3	2	..	37428i
32	446	45.3	-70 27	10.3	10.8	F8	3	..	15167b	82	1435	45.7	+39 33	6.46	6.52	A2	..	0.6-	56,81
33	374	45.3	-71 5	9.5	10.5	Ko	2	..	15167b	83	..	45.7	+32 31	Cl.	Cl.	Con.	4	R	37377i
34	867	45.4	+58 45	8.6	9.7	K2	1	..	37408i	84	1087	45.7	+23 21	7.05	8.23	K5	4	..	38084i
35	1174	45.4	+33 31	9.5	9.5	Ao	2	..	37377i	85	1138	45.7	+20 25	9.5	10.6	K2	1	..	38084i
36	1111	45.4	+32 13	9.0	9.0	B9	2	..	37377i	86	1089	45.7	+8 5	8.7	8.7	Ao	2	..	14071i
37	919	45.4	+28 25	8.1	8.2	A2	3	..	37377i	87	1057	45.7	+4 12	8.9	9.0	A5	1	..	14071i
38	919	45.4	+28 25	8.1	8.2	A2	3	..	37377i	88	1249	45.7	-9 1	9.8	9.8	Ao	4	..	20546b
39	1051	45.4	+14 38	8.8	8.9	A2	3	E	38223i	89	1251	45.7	-9 43	9.1	9.2	A2	5	..	18394b
40	905	45.4	+10 35	8.3	9.3	Ko	1	..	38223i	90	3135	45.7	-23 0	5.78	5.7	A2	..	..	56,121
41	1025	45.4	+7 27	8.8	8.9	A2	2	..	38223i	91	2469	45.7	-34 35	8.7	10.5	K2	1	..	44364b
42	1149	45.4	+1 40	8.9	10.0	K2	4	..	39866b	92	2163	45.7	-42 21	7.9	8.7	Go	5	..	20649b
43	1299	45.4	-11 51	9.0	9.5	F8	1	..	18414b	93	940	45.7	-53 39	8.6	8.7	Ao	5	..	24143b
44	1241	45.4	-22 12	9.4	9.7	K	2	..	17395b	94	447	45.7	-70 14	8.34	9.4	Go	5	5.9 R	24561b
45	1240	45.4	-22 15	9.4	9.7	K2	2	..	17395b	95	410	45.7	-72 36	9.5	10.5	Ko	1	..	15167b
46	2700	45.4	-25 35	9.4	9.5	A2	3	..	45993b	96	349	45.7	-74 54	9.43	9.5	F5	4	..	15162b
47	2516	45.4	-29 37	8.61	9.4	Ko	2	..	12664b	97	152	45.7	-81 40	7.24	7.7	F5	9	..	20557b
48	2573	45.4	-32 32	6.93	8.5	Ko	5	..	14690b	98	1242	45.8	+50 9	9.07	9.07	Ao	2	..	37366i
49	2077	45.4	-40 59	9.4	9.3	Go	3	..	20649b	99	1020	45.8	+29 21	9.4	9.4	A	2	..	37377i
50	349	45.4	-76 6	9.5	10.3	G5	2	E	20652b	100	1021	45.8	+29 53	8.91	8.89	B9	2	..	37377i

THE HENRY DRAPER CATALOGUE.

39200

5^h 45^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1090	45.8	+ 8 52	8.2	8.6	F5	3	..	38223i	51	1203	46.2	+34 25	7.7	8.2	F8	3	..	37377i
2	1193	45.8	+ 0 19	8.9	9.5	Go	4	..	12754b	52	1029	46.2	+ 7 31	9.1	10.2	K2	1	..	38412b
3	1040	45.8	- 1 18	8.8	8.9	A3	2	..	39866b	53	1058	46.2	+ 3 45	8.3	8.3	A0	2	..	14071i
4	1206	45.8	-18 19	8.8	9.3	F8	4	..	12632b	54	1259	46.2	- 4 37	9.6	9.6	B9	3	..	20546b
5	1205	45.8	-20 7	9.38	9.4	A0	2	..	17395b	55	1232	46.2	- 8 52	9.1	10.1	K0	2	..	20546b
6	1277	45.8	-21 26	9.1	9.7	F2	3	..	17395b	56	1271	46.2	-16 1	9.4	9.5	A5	2	..	12632b
7	2164	45.8	-42 18	8.6	8.6	A0	6	..	20649b	57	3146	46.2	-23 15	9.3	8.9	A2	3	..	17395b
8	1022	45.9	+29 29	8.2	9.3	K2	1	..	37377i	58	2713	46.2	-25 48	8.6	9.5	K0	3	..	45993b
9	891	45.9	+16 45	8.8	8.9	A2	2	..	37568i	59	481	46.2	-63 18	9.6	9.7	A3	3	..	38371b
10	908	45.9	+10 13	8.87	8.87	A0	4	..	38223i	60	212	46.2	-77 20	10.0	10.6	G	2	E	20652b
11	1421	45.9	- 5 58	9.8	10.4	Go	2	..	20546b	61	114	46.3	+84 6	9.0	9.4	F5	4	..	38330i
12	2704	45.9	-25 1	8.90	8.9	F2	4	..	12664b	62	911	46.3	+10 39	8.4	9.2	G5	3	..	38223i
13	2413	45.9	-37 32	9.0	10.0	G5	3	..	46181b	63	910	46.3	+10 25	8.9	8.9	A0	2	..	38223i
14	2081	45.9	-41 15	9.0	9.3	F8	6	..	20649b	64	1422	46.3	- 5 38	9.1	10.2	K2	2	..	20546b
15	2165	45.9	-42 49	9.2	9.0	A0	4	..	20649b	65	1263	46.3	-17 9	9.1	10.3	K5	1	..	12632b
16	939	45.9	-56 51	8.7	9.8	K5	2	..	18484b	66	1243	46.3	-22 36	8.8	8.9	G5	5	..	17395b
17	411	45.9	-72 57	10.5	10.6	A5	1	..	15167b	67	2652	46.3	-30 51	8.1	8.5	A3	3	..	12664b
18	554	46.0	+64 18	9.4	9.5	A5	3	..	38154i	68	2476	46.3	-36 44	10.2	11.2	K0	1	..	46181b
19	832	46.0	+61 51	8.5	8.8	F0	4	..	38154i	69	331	46.3	-74 0	10.2	10.3	A2	4	..	15167b
20	920	46.0	+59 52	5.26	5.26	A0	..	O, R	56,81	70	961	46.4	+53 58	9.2	9.5	F0	2	..	37366i
21	1078	46.0	+56 12	8.7	9.5	G5	2	..	37407i	71	1008	46.4	+52 14	8.9	8.9	B9	3	..	37366i
22	1243	46.0	+50 43	8.4	9.4	K0	2	..	37366i	72	1191	46.4	+45 45	8.6	8.6	A0	2	..	37428i
23	1437	46.0	+39 13	8.7	8.7	A0	1	..	38124i	73	1321	46.4	+38 16	8.7	8.8	A2	2	..	38124i
24	1202	46.0	+34 15	8.0	8.3	F0	5	..	37377i	74	1027	46.4	+29 45	8.6	9.2	Go	2	..	37377i
25	1179	46.0	+33 53	6.38	7.73	Ma	5	..	37377i	75	1072	46.4	+29 45	8.6	9.2	Go	2	..	37377i
26	924	46.0	+28 36	9.0	9.1	A2	2	..	37377i	76	1072	46.4	+22 42	9.5	9.6	A2	2	..	38084i
27	1106	46.0	+19 30	7.12	7.10	B9	7	..	37568i	77	1058	46.4	+14 23	8.5	8.5	A0	4	..	37568i
28	1003	46.0	+13 22	9.1	9.5	F5	1	..	38223i	78	1280	46.4	-21 53	9.1	9.1	A0	4	..	17395b
29	1091	46.0	+ 8 28	8.3	8.3	B9	4	..	38412b	79	2532	46.4	-35 56	9.0	10.5	K5	2	..	46181b
30	1332	46.0	- 6 15	9.1	9.1	B9	3	..	20546b	80	2271	46.4	-44 43	8.18	8.4	K0	4	..	12756b
31	1269	46.0	-16 14	9.1	9.2	A5	4	..	12632b	81	941	46.4	-53 42	7.7	9.0	K0	4	..	24143b
32	1260	46.0	-17 58	9.0	9.0	A0	3	..	12632b	82	509	46.4	-67 45	8.2	8.2	A0	6	O,4-	18485b
33	1207	46.0	-20 44	9.6	10.0	K	1	..	17395b	83	1027	46.5	+55 41	4.92	4.98	A2	..	2, R	56,81
34	2529	46.0	-27 35	9.0	9.5	K0	2	O,2	45993b	84	1014	46.5	+25 16	9.0	9.0	A0	1	..	38084i
35	2414	46.0	-37 13	7.6	7.2	B9	7	1,5-	46181b	85	1144	46.5	+20 40	8.4	8.4	B9	6	..	38084i
36	2419	46.0	-37 57	9.6	10.2	Go	3	..	46181b	86	1110	46.5	+19 50	6.00	5.98	B9	6	..	37568i
37	1127	46.1	+31 26	8.8	8.8	B9	2	..	37377i	87	1007	46.5	+13 21	8.9	9.7	G5	2	..	38223i
38	1258	46.1	- 4 56	8.95	9.03	A3	4	..	20546b	88	1049	46.5	+ 6 46	8.1	9.1	K0	2	..	38223i
39	1242	46.1	-22 45	10.0	9.7	A3	1	..	17395b	89	1063	46.5	+ 4 20	8.4	8.7	F2	3	..	14071i
40	3473	46.1	-24 8	8.8	9.5	K2	3	..	12664b	90	1391	46.5	- 2 57	8.6	9.6	K0	4	..	12754b
41	2647	46.1	-30 40	6.75	7.7	G5	7	..	12664b	91	1187	46.5	- 7 33	5.32	5.15	B3	..	O,8-	56,81
42	2418	46.1	-37 1	10.0	10.5	K0	1	..	46181b	92	1211	46.5	-18 39	9.1	9.9	G5	1	..	12632b
43	2066	46.1	-43 18	10.3	10.5	A3	2	..	20649b	93	3151	46.5	-23 15	9.6	9.2	F5	2	..	17395b
44	2024	46.1	-46 20	8.0	7.4	A3	7	..	12756b	94	2587	46.5	-32 51	6.78	7.1	A0	8	O,8	14690b
45	330	46.1	-73 35	9.0	9.8	G5	7	O,4	15167b	95	2479	46.5	-34 35	7.34	9.0	K5	3	..	12665b
46	350	46.1	-74 57	9.53	10.5	K0	2	E	20652b	96	2481	46.5	-36 14	8.4	9.0	A5	3	..	12665b
47	333	46.1	-75 18	9.2	10.6	Mb	2	..	15162b	97	2087	46.5	-41 4	10.0	9.5	K5	3	..	20649b
48	334	46.1	-75 53	8.3	8.6	F0	8	..	15162b	98	501	46.5	-65 32	9.4	9.9	F8	3	..	38371b
49	1007	46.2	+52 42	8.9	9.2	F0	2	O,2	37407i	99	415	46.6	+68 2	8.5	9.3	G5	3	E	38112i
50	1306	46.2	+44 16	8.4	8.4	A0	3	..	38935i	100	615	46.6	+63 53	9.0	9.0	B9	4	..	38154i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39300

5^h 46^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	616	46.6	+63 16	7.9	8.0	A5	4	E	36654i	51	2513	46.9	-26 46	9.0	9.6	Ko	2	..	45993b
2	1446	46.6	+40 24	8.1	8.2	A2	3	3,3	37429i	52	2540	46.9	-29 9	8.30	8.8	G5	4	..	12664b
3	1028	46.6	+29 5	8.4	9.2	G5	3	..	37377i	53	2075	46.9	-43 23	7.3	7.3	B8	10	..	20649b
4	927	46.6	+28 26	9.0	8.9	B5	2	..	37377i	54	350	47.0	+69 35	7.04	7.32	Fo	7	E	38112i
5	1113	46.6	+19 43	7.64	8.64	Ko	3	..	38084i	55	1119	47.0	+32 16	9.0	9.0	B9	2	..	37377i
6	925	46.6	+12 51	8.42	8.42	Ao	2	..	38223i	56	930	47.0	+28 15	8.2	9.4	K5	1	..	37377i
7	1274	46.6	-16 0	9.1	9.2	A2	3	..	12632b	57	899	47.0	+27 35	4.54	4.54	Ao	..	0,10	56,81
8	3152	46.6	-23 24	10.1	9.5	Go	1	..	17395b	58	1149	47.0	+20 45	7.7	7.7	B9	7	..	38084i
9	2236	46.6	-38 9	9.4	9.5	Fo	1	..	46181b	59	1047	47.0	-1 3	8.8	9.2	F5	5	..	12754b
10	2088	46.6	-41 38	10.0	9.8	Go	2	..	20649b	60	1424	47.0	-5 57	10.3	10.3	Ao	2	..	20546b
11	2070	46.6	-43 19	10.3	10.9	G5	1	..	20649b	61	1303	47.0	-10 28	8.0	9.2	K5	2	..	18414b
12	2274	46.6	-44 55	6.32	7.7	K2	8	..	12756b	62	1266	47.0	-17 9	10.7	10.7	Ao	2	..	12632b
13	336	46.6	-75 34	9.9	10.5	G	3	E	20652b	63	1210	47.0	-20 20	8.6	9.7	K2	3	..	17395b
14	1440	46.7	+39 5	8.2	9.4	K5	2	..	38124i	64	1211	47.0	-20 53	3.90	4.90	Ko	..	R	28,198
15	1347	46.7	+37 19	6.66	7.08	F5	6	..	37429i	65	1245	47.0	-22 48	9.8	9.2	A2	3	..	17395b
16	1118	46.7	+32 9	8.8	9.1	Fo	2	..	37377i	66	3160	47.0	-23 25	8.4	7.9	A2	7	0,5	17395b
17	1060	46.7	+14 9	5.57	5.55	B9	..	0,R	56,81	67	2515	47.0	-26 31	9.1	9.6	K2	2	..	45993b
18	1300	46.7	-10 2	8.81	8.95	A5	1	..	18414b	68	2431	47.0	-37 39	6.99	8.7	K5	4	..	12665b
19	1304	46.7	-11 40	7.07	7.05	B9	8	..	20485b	69	879	47.0	-55 54	8.6	9.6	Go	1	..	18484b
20	1214	46.7	-18 12	9.6	9.6	Ao	2	..	12632b	70	528	47.0	-61 14	8.7	8.9	Ao	6	..	15147b
21	1213	46.7	-18 45	9.4	9.5	A2	2	..	12632b	71	513	47.0	-67 27	9.2	9.7	F8	2	..	18485b
22	3485	46.7	-24 21	9.1	9.2	F2	2	..	12664b	72	555	47.1	+64 8	8.8	10.0	K5	1	..	38154i
23	2719	46.7	-25 44	8.8	9.5	G5	2	..	45993b	73	1034	47.1	+7 32	8.4	9.5	K2	3	..	38412b
24	2538	46.7	-29 13	var.	var.	Md	1	R	12664b	74	1051	47.1	+6 11	7.00	7.78	G5	4	..	14071i
25	2427	46.7	-37 46	10.0	10.4	Go	2	..	46181b	75	1034	47.1	+5 17	8.5	8.9	F5	3	..	14071i
26	2089	46.7	-41 43	10.0	9.8	F2	2	..	20649b	76	1192	47.1	-7 19	8.0	8.0	B9	7	1,3	20546b
27	477	46.7	-64 47	9.0	9.6	Go	4	..	38371b	77	1281	47.1	-13 49	8.4	9.6	K5	1	..	18414b
28	153	46.7	-81 52	9.9	10.5	G	1	..	20557b	78	1267	47.1	-17 56	8.0	8.0	Ao	6	..	12632b
29	155	46.8	+82 27	8.8	9.8	Ko	2	..	37558i	79	1283	47.1	-21 37	10.0	10.0	F5	2	..	17395b
30	1282	46.8	+36 6	7.35	8.35	Ko	4	..	38124i	80	2724	47.1	-25 42	8.8	9.8	Ko	2	..	45993b
31	927	46.8	+12 18	8.3	9.1	G5	2	..	38223i	81	2176	47.1	-42 2	9.2	9.2	F2	4	..	20649b
32	1244	46.8	-22 14	9.4	9.7	K5	3	..	17395b	82	1270	47.2	+35 18	8.5	8.5	B9	3	..	38124i
33	2539	46.8	-29 53	8.84	9.4	F2	4	..	44364b	83	1282	47.2	-13 55	8.8	9.2	F5	1	..	18414b
34	2569	46.8	-33 23	8.7	9.3	F8	3	..	44364b	84	1286	47.2	-19 6	9.1	9.5	G5	2	..	12632b
35	2072	46.8	-43 32	9.2	9.6	Go	3	..	20649b	85	1246	47.2	-22 58	6.09	7.8	Ko	8	5,9	12664b
36	943	46.8	-53 30	8.6	9.2	G5	3	..	24143b	86	3491	47.2	-24 2	9.1	9.0	F5	4	..	12664b
37	414	46.8	-72 42	8.5	8.9	F5	6	..	20540b	87	2542	47.2	-35 58	9.0	10.0	F5	3	..	46181b
38	214	46.8	-77 45	9.9	10.3	F5	3	..	15162b	88	2433	47.2	-37 6	9.4	10.2	Go	2	0,2	42917b
39	1041	46.9	+30 25	8.0	8.5	F8	3	..	37377i	89	201	47.2	-78 41	9.2	10.3	K2	4	..	20652b
40	985	46.9	+26 25	8.1	7.9	B3	3	..	37377i	90	871	47.3	+59 1	8.6	8.7	A3	3	..	37407i
41	913	46.9	+10 7	8.82	9.32	F8	3	..	38223i	91	1081	47.3	+22 46	9.0	9.1	A2	2	..	38084i
42	990	46.9	+9 24	9.3	10.7	Mb	..	..	M	92	1080	47.3	+22 3	8.6	9.1	F8	3	..	38084i
43	988	46.9	+9 9	8.5	9.5	Ko	1	..	38223i	93	1025	47.3	+21 31	8.2	9.0	G5	4	..	38084i
44	1033	46.9	+7 19	7.8	8.8	Ko	3	..	38223i	94	998	47.3	+18 57	8.7	8.7	B9	3	..	37568i
45	1107	46.9	-0 14	9.1	9.1	Ao	4	..	12754b	95	899	47.3	+16 20	8.3	8.3	B9	4	..	37568i
46	1046	46.9	-1 22	9.3	9.3	Ao	1	..	39866b	96	992	47.3	+9 48	8.5	9.0	F8	2	..	38223i
47	1335	46.9	-6 49	9.0	9.1	A2	4	..	20546b	97	1036	47.3	+5 51	8.4	8.5	A2	3	..	38412b
48	1190	46.9	-7 57	8.4	8.4	Ao	6	0,3	20546b	98	1035	47.3	+5 8	8.56	9.34	G5	3	..	38412b
49	1280	46.9	-16 53	10.0	10.1	A2	2	..	12632b	99	1061	47.3	+3 42	8.4	8.4	Ao	3	..	38412b
50	2722	46.9	-25 54	9.0	9.0	A2	3	..	12664b	100	1151	47.3	+1 50	5.01	6.01	Ko	7	..	14071i

THE HENRY DRAPER CATALOGUE.

39400

5^h 47^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1109	m. 47.3	° 0 56	8.8	8.8	Ao	5	..	12754b	51	933	m. 47.6	° +28 56	9.0	9.0	B9	2	..	37377i
2	1426	47.3	- 5 31	9.6	10.0	F5	2	..	20546b	52	1100	47.6	+23 14	8.7	8.7	Ao	3	..	38084i
3	1254	47.3	- 9 50	7.36	7.64	Fo	8	..	18394b	53	1084	47.6	+22 25	9.4	9.4	A	2	..	38084i
4	1305	47.3	-11 22	8.6	8.6	Ao	4	..	12770b	54	1027	47.6	+21 9	8.2	9.3	K2	3	..	38084i
5	1213	47.3	-20 51	8.7	9.4	G5	5	..	17395b	55	1001	47.6	+18 8	7.4	7.8	F5	5	..	37568i
6	3492	47.3	-24 19	10.3	9.5	Ao	3	..	12664b	56	960	47.6	+11 48	7.20	7.62	F5	6	..	37568i
7	455	47.3	-66 44	9.4	10.4	K	1	..	18485b	57	1396	47.6	- 2 3	9.1	9.7	Go	2	..	12754b
8	794	47.4	+62 14	9.5	10.1	Go	1	..	38154i	58	1397	47.6	- 2 11	9.1	9.6	F8	2	..	12754b
9	921	47.4	+59 58	9.01	9.01	Ao	2	..	38154i	59	1196	47.6	-15 41	9.4	9.9	F8	2	..	12632b
10	872	47.4	+58 1	8.6	8.6	Ao	4	..	37407i	60	1269	47.6	-17 2	8.8	9.1	F2	3	..	12632b
11	1010	47.4	+52 19	9.4	9.5	A2	2	..	37366i	61	2512	47.6	-28 22	9.0	8.6	Ao	3	..	12664b
12	1419	47.4	+49 20	9.5	9.6	A2	2	..	37366i	62	2437	47.6	-37 20	9.0	9.0	A5	6	..	46181b
13	1211	47.4	+47 6	7.8	7.9	A2	3	2,2	37366i	63	1635	47.6	-51 4	7.7	7.9	Ko	5	..	24143b
14	1194	47.4	+45 19	8.6	8.6	Ao	3	..	38935i	64	482	47.6	-63 26	9.4	10.0	G	2	..	15147b
15	1308	47.4	+44 30	8.6	9.0	F5	3	..	37391i	65	215	47.6	-77 30	9.3	10.5	K5	3	3,2	20652b
16	1020	47.4	+25 3	7.66	8.44	G5	3	..	38084i	66	1352	47.7	+37 24	9.1	9.1	Ao	1	..	38124i
17	1156	47.4	+20 17	6.56	6.54	B9	8	..	37568i	67	1043	47.7	+17 42	9.9	9.9	A	1	..	37568i
18	1080	47.4	+ 2 24	9.1	9.2	A5	2	..	38412b	68	1266	47.7	-14 49	8.6	9.7	K2	3	..	12632b
19	1337	47.4	- 6 52	9.1	9.1	B9	4	..	20546b	69	1216	47.7	-18 46	10.0	10.1	A2	2	..	12632b
20	1193	47.4	- 7 45	9.8	10.2	F5	2	..	20546b	70	2545	47.7	-29 36	9.6	9.9	A5	1	..	44364b
21	1255	47.4	- 9 5	5.96	5.96	Ao	3	0,8	2345b	71	2784	47.7	-31 32	8.4	9.9	Ko	1	..	44364b
22	1215	47.4	-18 46	9.1	10.2	K2	1	..	12632b	72	2106	47.7	-40 28	11.4	10.3	F8	2	..	20649b
23	1284	47.4	-21 39	8.5	9.7	Ma	3	..	17395b	73	2094	47.7	-41 59	10.4	9.8	A2	3	..	20649b
24	1249	47.4	-22 3	9.1	8.8	A2	5	..	17395b	74	903	47.7	-54 57	9.24	9.6	G5	2	..	24143b
25	2546	47.4	-35 48	3.22	4.22	Ko	..	0,3 R	28,198	75	515	47.7	-67 48	8.7	10.1	Mb	2	..	18485b
26	2080	47.4	-43 2	10.3	10.8	F8	2	..	20649b	76	1318	47.8	+48 59	8.4	9.5	K2	1	..	37366i
27	2082	47.4	-43 44	8.9	8.7	G5	4	..	20649b	77	1045	47.8	+30 28	7.46	7.34	B5	5	..	37377i
28	530	47.4	-61 4	9.0	9.7	Fo	3	..	15147b	78	992	47.8	+26 24	8.4	8.4	B8	3	E	38084i
29	413	47.5	+66 5	6.59	7.59	Ko	6	..	36654i	79	995	47.8	+ 9 33	7.7	8.8	K2	3	..	38223i
30	962	47.5	+53 27	8.0	9.4	Ma	2	0,2	37366i	80	1065	47.8	+ 3 2	8.1	8.9	G5	4	..	38412b
31	1125	47.5	+51 6	8.4	9.4	Ko	3	..	37366i	81	1240	47.8	- 8 1	9.0	9.3	Fo	4	..	20546b
32	1434	47.5	+42 20	8.8	8.9	A2	2	..	37429i	82	1271	47.8	-17 35	7.8	8.6	G5	3	..	20485b
33	1325	47.5	+38 35	8.6	8.6	Ao	3	..	38124i	83	3181	47.8	-23 54	10.5	9.5	F5	2	..	17395b
34	1326	47.5	+38 34							84	2731	47.8	-25 15	7.08	7.5	A2	9	..	12664b
35	1021	47.5	+25 34	8.2	8.2	Ao	3	..	38084i	85	2785	47.8	-31 48	8.29	9.2	K2	3	..	14690b
36	1007	47.5	+24 16	7.8	7.8	B8	5	..	38084i	86	2108	47.8	-40 21	8.7	8.9	Fo	6	..	20649b
37	1054	47.5	+ 6 7	8.9	9.4	F8	4	..	38412b	87	2084	47.8	-43 40	10.3	11.3	K5	1	..	20649b
38	1395	47.5	- 2 19	7.8	8.2	F5	8	..	12754b	88	1907	47.8	-49 1	7.2	6.9	G5	8	..	12756b
39	1194	47.5	- 7 24	8.8	8.8	Ao	5	1,2	20546b	89	1953	47.8	-50 56	9.7	9.1	Go	1	..	24143b
40	1257	47.5	- 8 59	8.0	9.0	Ko	6	..	20546b	90	352	47.8	-76 49	9.2	9.8	Go	6	..	15162b
41	1193	47.5	-15 32	7.16	7.16	Ao	8	..	20485b	91	1121	47.9	+32 29	8.8	8.8	Ao	2	..	37377i
42	1287	47.5	-19 25	7.6	9.1	K5	4	..	17395b	92	1024	47.9	+25 31	8.7	8.8	A2	2	..	38084i
43	2599	47.5	-32 20	8.0	8.9	Ko	4	..	14690b	93	1067	47.9	+14 25	8.8	8.8	Ao	2	..	37568i
44	2435	47.5	-37 41	9.3	9.3	A5	4	..	46181b	94	1101	47.9	+ 8 14	9.3	9.6	Fo	2	..	38412b
45	2222	47.5	-39 47	8.15	8.9	Go	7	..	20649b	95	1055	47.9	+ 6 6	8.7	9.7	Ko	1	..	38412b
46	482	47.5	-60 21	8.6	10.3	Ko	2	..	15147b	96	1069	47.9	+ 4 58	9.11	9.39	Fo	2	..	38412b
47	963	47.6	+53 26	9.2	9.6	F5	2	0,2	37366i	97	1068	47.9	+ 4 5	8.3	9.3	Ko	4	..	38412b
48	1011	47.6	+52 58	8.0	8.8	G5	3	0,3	37407i	98	1081	47.9	+ 2 49	8.9	10.1	K5	2	..	38412b
49	1246	47.6	+50 1	9.52	9.80	F	1	R	37366i	99	1221	47.9	- 3 11	8.6	9.6	Ko	5	..	12754b
50	1289	47.6	+36 30	8.4	9.2	G5	1	..	38124i	100	1289	47.9	-19 4	7.20	8.5	Ko	7	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39500

5^h 47^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3499	47.9	-24 20	10.1	9.8	Ko	2	..	45993b	51	1128	48.3	+51 46	6.48	6.56	A3	7	1,8	37366i
2	3501	47.9	-24 28	10.1	9.8	A3	2	..	45993b	52	1127	48.3	+51 32	8.6	8.7	A2	3	..	37366i
3	2668	47.9	-30 30	8.8	9.2	G5	4	..	44364b	53	1379	48.3	+43 34	8.2	8.2	Ao	3	..	37391i
4	2110	47.9	-40 44	11.4	10.1	F5	2	..	20649b	54	1159	48.3	+20 51	9.5	9.6	A3	2	..	38084i
5	531	47.9	-61 10	9.9	10.9	Ko	2	..	15147b	55	975	48.3	+15 5	8.64	9.14	F8	2	..	37568i
6	333	47.9	-73 38	9.7	10.8	K2	1	..	15167b	56	1040	48.3	+ 5 7	8.96	9.46	F8	2	..	38412b
7	1030	48.0	+21 49	8.8	8.8	Ao	3	..	38084i	57	1203	48.3	+ 0 46	8.9	8.9	B8	3	..	12754b
8	904	48.0	+16 7	8.2	8.1	B5	4	..	37568i	58	1223	48.3	- 3 34	8.6	8.9	Fo	6	..	12754b
9	1018	48.0	+13 52	8.3	8.4	A2	3	..	37568i	59	1288	48.3	-16 41	9.1	9.7	Go	3	..	12632b
10	1039	48.0	+ 7 6	9.3	9.3	Ao	4	..	38412b	60	1217	48.3	-20 49	9.0	9.5	Fo	4	..	17395b
11	1398	48.0	- 2 43	9.1	9.2	A2	3	..	12754b	61	1290	48.3	-21 41	9.1	9.7	Ko	3	..	17395b
12	1241	48.0	- 8 21	9.1	10.1	Ko	3	..	20546b	62	3188	48.3	-23 18	9.6	9.7	G5	1	..	17395b
13	1296	48.0	-12 47	8.24	8.74	F8	2	..	20485b	63	2185	48.3	-42 0	9.0	9.9	G5	4	..	20649b
14	1267	48.0	-14 35	8.0	8.8	G5	3	..	20485b	64	2090	48.3	-43 34	9.5	9.0	Ao	4	..	20649b
15	1199	48.0	-15 34	8.4	8.5	A2	4	..	20485b	65	886	48.3	-55 7	7.44	7.9	Fo	6	..	24143b
16	1198	48.0	-15 52	9.1	9.7	Go	2	..	12632b	66	887	48.3	-55 39	8.7	8.6	Go	4	..	18484b
17	1272	48.0	-17 39	9.1	9.4	Fo	3	..	12632b	67	504	48.3	-65 12	7.61	9.3	Ko	6	2,4	15147b
18	1287	48.0	-21 53	8.4	8.8	F5	6	..	17395b	68	1013	48.4	+52 56	9.2	9.3	A3	2	..	37366i
19	2229	48.0	-39 21	8.5	9.3	Ko	2	..	46181b	69	907	48.4	+16 19	8.2	8.3	A3	3	R	37568i
20	2228	48.0	-39 35	8.7	9.5	Ko	2	..	46181b	70	937	48.4	+12 25	7.56	8.06	F8	4	..	37568i
21	2286	48.0	-44 14	9.7	9.7	G5	3	..	20649b	71	1059	48.4	+ 6 51	8.9	9.4	F8	2	..	38412b
22	2194	48.0	-45 47	9.2	10.5	Ko	1	..	12756b	72	1155	48.4	+ 1 43	8.7	8.7	B9	6	..	12754b
23	946	48.0	-56 12	4.38	6.6	Ko	..	R	28,198	73	1055	48.4	- 1 17	9.3	10.5	K5	1	..	12754b
24	456	48.0	-66 42	9.6	9.7	A5	2	..	18485b	74	1200	48.4	- 7 52	10.5	10.6	A2	1	..	20546b
25	340	48.0	-75 50	10.0	10.6	G	1	E	20652b	75	2532	48.4	-26 20	7.9	8.4	Ao	4	..	12664b
26	1292	48.1	+36 14	7.38	8.38	Ko	3	..	38124i	76	2525	48.4	-28 42	9.1	9.5	Go	2	..	42904b
27	1273	48.1	+35 3	7.97	8.97	Ko	2	..	38124i	77	888	48.4	-55 5	7.39	8.0	K2	5	..	24143b
28	1040	48.1	+ 7 38	8.5	9.3	G5	2	..	38223i	78	949	48.4	-56 50	8.6	9.2	F2	3	..	18484b
29	1056	48.1	+ 6 14	7.28	7.84	Go	3	..	14071i	79	522	48.4	-59 52	8.78	9.4	Go	3	..	18484b
30	1201	48.1	-15 10	9.1	9.4	F2	3	..	12632b	80	457	48.4	-66 40	8.4	9.4	Ko	4	..	18485b
31	1200	48.1	-15 29	8.7	8.8	A2	5	..	12632b	81	377	48.4	-71 38	9.4	9.8	F5	5	5,2	15167b
32	3504	48.1	-24 25	10.8	10.4	Ao	1	..	45993b	82	875	48.5	+58 10	8.4	9.2	G5	2	..	37407i
33	2734	48.1	-25 59	6.87	8.3	G5	7	..	12664b	83	922	48.5	+57 18	8.4	9.4	Ko	2	..	37408i
34	2529	48.1	-26 32	9.8	10.1	Ko	2	..	45993b	84	1080	48.5	+56 57	8.5	8.5	Ao	4	..	37407i
35	2112	48.1	-40 45	10.7	9.8	F8	3	..	20649b	85	967	48.5	+53 20	8.6	9.7	K2	2	..	37366i
36	353	48.1	-74 13	9.9	10.9	K	1	..	15167b	86	1139	48.5	+31 41	5.81	5.89	A3	8	..	37377i
37	959	48.2	+54 15	8.4	9.0	Go	4	5,4	37407i	87	1162	48.5	+20 16	4.62	5.12	F8	..	0, R	3273c
38	1126	48.2	+51 51	8.9	9.4	F8	2	..	37366i	88	1010	48.5	+18 54	7.7	7.7	Ao	4	..	37568i
39	1042	48.2	+ 7 42	8.7	8.8	A2	2	..	38223i	89	942	48.5	+12 32	8.1	8.2	A5	3	..	37568i
40	1198	48.2	- 7 24	10.3	10.3	B9	3	..	20546b	90	922	48.5	+10 15	8.22	9.22	Ko	1	..	38223i
41	1199	48.2	- 7 53	10.4	10.9	F8	1	..	20546b	91	1061	48.5	+ 6 31	8.3	8.3	B9	4	..	38412b
42	1289	48.2	-21 33	9.1	10.0	Go	1	..	17395b	92	1342	48.5	- 6 8	10.0	10.0	Ao	2	..	20546b
43	2556	48.2	-29 29	6.49	8.1	Ko	6	..	12664b	93	1204	48.5	- 7 19	9.8	10.3	F8	3	..	20546b
44	2790	48.2	-31 32	8.8	9.8	Go	2	..	44364b	94	1315	48.5	-11 38	8.7	9.2	F8	2	..	18414b
45	2440	48.2	-37 46	10.0	10.8	Ko	1	5,1	46181b	95	1302	48.5	-12 19	9.1	9.1	Ao	2	..	18414b
46	2114	48.2	-40 32	9.4	9.3	F8	3	..	20649b	96	1299	48.5	-12 39	8.2	8.3	A5	2	..	18414b
47	791	48.2	-52 48	6.34	7.1	F5	8	R	24143b	97	3194	48.5	-23 26	10.3	9.7	Go	1	..	17395b
48		48.2	-52 48			A				98	2563	48.5	-29 21	9.8	9.8	Ao	1	..	44364b
49	873	48.3	+58 31	8.9	9.7	G5	2	..	37408i	99	2609	48.5	-32 14	8.7	9.8	K5	1	..	14690b
50	966	48.3	+53 33	8.2	8.3	A2	6	1,5	37407i	100	2556	48.5	-35 56	8.0	7.6	Ao	6	2,7	9061b

THE HENRY DRAPER CATALOGUE.

39600

5^h 48^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2117	48.5	-40 10	7.9	8.9	G5	7	..	20649b	51	3513	48.8	-24 28	9.0	9.3	Ko	2	..	12664b
2	2104	48.5	-41 43	8.0	8.6	Go	5	..	20649b	52	2564	48.8	-27 20	9.3	9.6	Ao	3	3,2	45993b
3	2187	48.5	-42 55	9.7	10.3	Ko	2	..	20649b	53	2449	48.8	-37 11	9.0	9.9	Go	4	0,2	46181b
4	2292	48.5	-44 34	8.5	8.8	Ko	6	..	20649b	54	2109	48.8	-41 8	7.0	8.3	K5	7	..	20649b
5	2046	48.5	-46 23	9.0	9.7	Ko	2	..	12756b	55	2295	48.8	-44 3	8.6	8.5	Fo	5	..	20649b
6	1957	48.5	-50 44	8.6	9.2	K2	2	..	12756b	56	486	48.8	-63 3	9.2	10.4	K5	2	..	15147b
7	950	48.5	-53 27	8.1	8.3	A5	6	..	24143b	57	354	48.8	-74 5	9.2	9.8	Go	6	..	15167b
8	487	48.5	-60 43	7.2	9.5	K2	6	..	15147b	58	963	48.9	+54 44	8.9	8.9	Ao	3	..	37366i
9	484	48.5	-63 24	9.4	10.4	Ko	2	..	15147b	59	1067	48.9	+46 6	10.2	..	Pd	1	..	37428i
10	355	48.6	+69 24	8.2	9.2	Ko	2	E	38112i	60	1304	48.9	+41 19	6.54	6.82	Fo	7	5,5	37429i
11	940	48.6	+28 23	8.6	8.6	B9	2	..	37377i	61	976	48.9	+15 30	8.2	8.2	B9	7	..	37568i
12	926	48.6	+10 13	6.98	7.76	G5	5	..	38223i	62	964	48.9	+11 45	6.46	6.44	B9	8	..	37568i
13	1048	48.6	+7 42	8.8	9.8	Ko	2	..	38412b	63	1104	48.9	+8 23	8.9	9.0	A2	3	..	38412b
14	1343	48.6	-6 26	9.1	9.1	B9	3	..	20546b	64	1345	48.9	-6 35	8.6	8.7	A2	3	..	20546b
15	1243	48.6	-8 8	8.6	9.7	K2	3	..	20546b	65	1246	48.9	-8 2	10.3	10.6	Fo	2	..	20546b
16	1242	48.6	-8 20	9.8	10.2	F5	3	..	20546b	66	1290	48.9	-16 1	9.6	9.7	A2	3	..	12632b
17	1289	48.6	-16 44	9.1	9.1	Ao	5	..	12632b	67	1291	48.9	-16 19	9.1	9.5	F5	4	..	12632b
18	1219	48.6	-20 44	9.6	9.8	F8	3	..	17395b	68	2679	48.9	-30 48	9.4	9.8	F5	2	..	44364b
19	3196	48.6	-23 39	9.4	9.4	G5	2	..	17395b	69	2561	48.9	-35 24	8.4	8.8	Ao	4	2,3	12665b
20	2567	48.6	-29 9	8.8	9.5	Go	2	5,2	42904b	70	2452	48.9	-37 38	10.7	10.8	Go	1	..	42917b
21	2501	48.6	-36 19	8.0	9.6	Ko	3	..	46181b	71	2192	48.9	-42 31	11.0	10.7	A	1	..	20649b
22	2118	48.6	-40 44	9.4	9.2	Fo	4	..	20649b	72	2094	48.9	-43 14	11.0	11.0	Go	1	..	20649b
23	2108	48.6	-41 53	9.4	10.4	Ma	2	..	20649b	73	1917	48.9	-49 22	8.5	9.4	K2	3	..	12756b
24	2189	48.6	-42 32	9.9	9.8	Ko	3	..	20649b	74	524	48.9	-69 47	9.2	10.6	Ma	..	..	M
25	1959	48.6	-50 40	8.7	8.8	Go	2	5,2	24143b	75	380	48.9	-71 2	9.1	9.7	Go	7	2,2	15167b
26	378	48.6	-71 34	10.2	10.8	G	2	R	15167b	76	1130	49.0	+51 45	8.6	9.4	G5	3	..	37366i
27	335	48.6	-73 26	10.3	10.6	F2	3	..	15167b	77	1037	49.0	+29 57	7.16	7.44	Fo	2	..	37377i
28	1028	48.7	+55 57	6.97	7.75	G5	4	5,3	37407i	78	1037	49.0	+21 23	7.8	7.8	B9	4	..	38084i
29	1440	48.7	+42 30	8.2	9.0	G5	2	..	37429i	79	1013	49.0	+18 15	8.9	8.9	Ao	3	..	37568i
30	1295	48.7	+36 47	9.0	9.0	Ao	2	..	38124i	80	1026	49.0	+13 49	7.9	7.7	B	2	R	38223i
31	1012	48.7	+18 29	8.1	8.9	G5	2	..	37568i	81	965	49.0	+11 29	7.6	7.6	B9	5	..	37568i
32	927	48.7	+10 34	6.50	7.50	Ko	5	..	38223i	82	1105	49.0	+8 17	8.7	9.7	Ko	3	..	38412b
33	1433	48.7	-5 18	8.4	9.4	Ko	4	..	20546b	83	1107	49.0	+8 2	7.7	7.7	B9	6	..	14071i
34	1344	48.7	-6 17	8.0	9.4	Ma	3	..	20546b	84	1042	49.0	+5 58	8.3	9.3	Ko	2	..	38412b
35	1309	48.7	-10 42	8.6	8.6	Ao	6	0,3	20546b	85	1071	49.0	+3 13	6.55	7.55	Ko	5	..	14071i
36	2532	48.7	-28 13	9.4	9.8	G5	1	..	42904b	86	1208	49.0	-7 3	9.1	9.7	Go	3	..	20546b
37	2590	48.7	-33 51	10.0	9.5	Go	2	..	44364b	87	1247	49.0	-8 1	10.5	10.9	F5	2	..	20546b
38	2190	48.7	-42 3	9.7	9.8	Go	3	..	20649b	88	1292	49.0	-16 17	7.9	8.5	Go	7	..	20485b
39	1960	48.7	-50 17	8.5	9.1	Ko	2	2,2	12756b	89	1278	49.0	-17 17	8.7	9.7	Ko	3	..	12632b
40	794	48.7	-52 8	4.98	6.6	Ko	..	5,8	28,198	90	1294	49.0	-21 50	9.1	9.7	K2	3	..	17395b
41	488	48.7	-60 50	9.2	10.0	Fo	4	..	15147b	91	1254	49.0	-22 29	9.1	9.7	F5	2	..	17395b
42	417	48.8	+68 8	8.9	9.7	G5	2	E	38112i	92	2574	49.0	-29 3	9.6	9.8	F	2	..	42904b
43	1214	48.8	+47 42	7.59	7.57	B9	5	..	37366i	93	2453	49.0	-37 44	8.7	9.9	A3	4	..	12665b
44	906	48.8	+27 19	8.0	8.4	F5	3	..	37377i	94	2098	49.0	-43 35	10.6	11.5	Ko	1	..	20649b
45	1096	48.8	+22 30	7.6	8.6	Ko	4	..	38084i	95	952	49.0	-56 56	8.8	9.5	A3	3	..	18484b
46	1435	48.8	-5 30	9.6	10.0	F5	2	..	20546b	96	1030	49.1	+55 59	9.5	10.1	Go	2	..	37407i
47	1434	48.8	-5 43	6.80	6.78	B9	6	1,10	37625i	97	1297	49.1	+36 55	7.16	7.30	A5	4	..	37429i
48	1259	48.8	-9 32	9.1	9.9	G5	2	..	20546b	98	1126	49.1	+19 44	5.89	5.70	B2	..	1,10	286c
49	1277	48.8	-17 48	8.4	9.2	G5	5	..	12632b	99	1051	49.1	+17 23	7.4	8.6	K5	4	..	37568i
50	1219	48.8	-18 4	9.1	9.6	F8	2	..	12632b	100	1027	49.1	+13 49	8.5	8.5	Ao	3	..	37568i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39700

5^h 49^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1073	49.1	+ 4 5	8.5	9.1	Go	2	..	38412b	51	2460	49.4	- 37 41	9.4	10.5	K2	1	..	46181b
2	1276	49.1	- 4 58	8.65	9.07	F5	5	..	20546b	52	2270	49.4	- 38 33	6.74	7.9	Ko	6	5,7	12665b
3	1208	49.1	- 15 29	9.0	9.0	Ao	4	..	12632b	53	2016	49.4	- 48 45	9.7	9.1	A3	3	..	12756b
4	1204	49.1	- 16 1	8.7	9.7	Ko	3	..	12632b	54	954	49.4	- 53 41	8.2	8.7	Fo	6	..	24143b
5	1221	49.1	- 20 10	8.4	9.4	K5	3	..	17395b	55	529	49.4	- 62 6	8.3	8.6	F2	8	..	15147b
6	2614	49.1	- 32 22	7.8	8.6	G5	5	E	14690b	56	451	49.4	- 70 23	8.2	8.6	F5	5	3,8	24561b
7	341	49.1	- 75 48	9.8	10.8	Ko	1	E	20652b	57	..	49.5	+ 51 41	..	..	Ao	2	..	37366i
8	112	49.1	- 83 18	8.8	9.9	K2	2	..	20557b	58	..	49.5	+ 7 1	8.1	8.2	A5	3	..	38412b
9	117	49.2	+ 84 7	9.2	9.6	F5	3	..	38330i	59	1054	49.5	+ 7 1	..	9.1	K	1	R	38412b
10	618	49.2	+ 63 48	9.2	9.3	A3	3	..	38154i	60	1228	49.5	- 3 4	9.1	9.1	Ao	1	..	12754b
11	1453	49.2	+ 39 42	8.6	8.6	Ao	2	..	37429i	61	1272	49.5	- 14 8	7.44	8.44	Ko	4	..	20485b
12	1055	49.2	+ 30 41	8.4	8.4	B8	3	..	37377i	62	1226	49.5	- 18 10	9.1	9.9	G5	2	..	12632b
13	1039	49.2	+ 29 9	7.85	8.63	G5	3	..	37377i	63	2620	49.5	- 32 50	8.0	8.0	A2	6	..	9061b
14	1110	49.2	+ 8 13	8.3	8.9	Go	4	..	38412b	64	2599	49.5	- 33 50	4.89	4.77	B5	..	R	28,198
15	1085	49.2	+ 2 9	9.1	10.2	K2	1	..	39866b	65	2508	49.5	- 36 22	10.4	11.3	G5	3	..	42917b
16	1347	49.2	- 6 46	8.6	8.5	B5	6	..	20546b	66	2201	49.5	- 45 27	9.5	9.6	G5	2	..	12756b
17	1256	49.2	- 22 23	8.2	8.6	B9	7	..	17395b	67	452	49.5	- 71 0	9.8	10.3	F8	4	..	15167b
18	2503	49.2	- 34 35	6.61	7.4	Go	8	..	12665b	68	353	49.5	- 76 48	10.4	11.2	G5	1	..	20652b
19	2506	49.2	- 36 44	8.7	10.5	Ma	1	..	46181b	69	1331	49.6	+ 38 27	8.1	8.1	B9	2	..	37429i
20	2457	49.2	- 37 40	5.64	6.8	Ko	..	0,9	28,198	70	1108	49.6	+ 23 16	8.8	8.9	A2	2	..	38084i
21	342	49.2	- 75 19	10.4	10.5	A5	2	E	20652b	71	946	49.6	+ 12 53	7.9	8.5	Go	3	..	37568i
22	216	49.2	- 77 23	9.7	10.8	K2	2	..	20652b	72	1065	49.6	+ 6 13	8.9	9.3	F5	2	..	38412b
23	921	49.3	+ 59 23	7.7	8.7	Ko	3	..	37407i	73	1044	49.6	+ 5 51	6.73	6.71	B9	6	..	14071i
24	1032	49.3	+ 55 39	7.09	7.09	Ao	6	0,5 R	37407i	74	1046	49.6	+ 5 20	7.7	8.5	G5	3	..	14071i
25	1283	49.3	+ 35 9	8.17	9.17	Ko	1	..	38124i	75	1208	49.6	+ 0 57	6.23	7.23	Ko	5	E	14071i
26	1039	49.3	+ 21 4	8.4	8.4	Ao	4	..	37446i	76	1229	49.6	- 3 13	8.6	9.0	F5	5	..	12754b
27	1168	49.3	+ 20 27	8.7	9.0	F2	2	..	38084i	77	1281	49.6	- 4 5	6.35	6.18	B3	7	..	37625i
28	1131	49.3	+ 19 40	8.10	8.10	Ao	3	..	37568i	78	2104	49.6	- 43 8	9.9	10.5	G5	2	..	20649b
29	1074	49.3	+ 14 12	6.84	7.84	Ko	..	5,6	56,81	79	343	49.6	- 75 22	9.8	10.8	Ko	1	E	20652b
30	1005	49.3	+ 9 15	8.8	8.9	A2	2	..	38223i	80	75	49.6	- 84 50	6.24	6.0	Ao	9	..	11010b
31	1043	49.3	+ 5 20	7.9	8.7	G5	4	..	38412b	81	915	49.7	+ 60 22	7.01	7.29	Fo	..	0,5-	56,81
32	1059	49.3	- 1 5	7.9	9.3	Ma	3	..	12754b	82	923	49.7	+ 57 53	8.9	9.0	A5	2	..	37407i
33	1304	49.3	- 12 25	8.01	9.01	Ko	3	..	12770b	83	1202	49.7	+ 45 29	var.	var.	Mc	..	R	M
34	3520	49.3	- 24 40	9.6	9.2	Ao	3	..	12664b	84	1301	49.7	+ 36 52	7.84	7.90	A2	4	..	38124i
35	2685	49.3	- 30 36	7.94	9.5	K5	3	..	14690b	85	1171	49.7	+ 20 27	8.2	9.4	K5	1	..	38084i
36	2565	49.3	- 35 39	8.7	9.0	Fo	4	5,3	12665b	86	1230	49.7	- 3 30	8.4	8.8	F5	6	..	12754b
37	2126	49.3	- 40 15	10.9	9.8	F5	2	..	20649b	87	1250	49.7	- 8 26	6.71	7.71	Ko	8	..	20546b
38	953	49.3	- 53 37	9.7	9.8	A3	2	..	24143b	88	1281	49.7	- 17 7	9.0	9.4	F5	5	..	12632b
39	440	49.3	- 68 26	10.0	10.0	A	1	R	18485b	89	1293	49.7	- 19 40	6.46	7.3	Ao	10	..	17395b
40	243	49.4	+ 75 44	9.37	9.51	A5	1	..	37343i	90	1225	49.7	- 20 54	9.1	10.0	K2	2	..	17395b
41	266a	49.4	+ 74 30	var.	var.	Md	..	R	M	91	3213	49.7	- 23 11	10.1	9.5	G5	2	..	17395b
42	1250	49.4	+ 50 21	8.9	9.4	F8	3	..	37366i	92	2540	49.7	- 28 22	9.4	9.2	F5	4	..	42904b
43	1423	49.4	+ 49 1	6.44	7.22	G5	6	5,4	37428i	93	2512	49.7	- 36 58	8.0	8.4	Ao	3	2,3	12665b
44	1070	49.4	+ 46 37	8.9	9.2	Fo	1	..	37428i	94	2461	49.7	- 37 28	10.7	10.2	Ao	3	0,2	46181b
45	1284	49.4	+ 35 13	7.82	8.82	Ko	3	..	38124i	95	2131	49.7	- 40 50	8.7	9.5	K5	3	..	20649b
46	914	49.4	+ 27 42	7.7	7.5	B2	..	2,5	56,81	96	2195	49.7	- 42 48	8.1	8.6	G5	5	..	20649b
47	1280	49.4	- 4 45	9.1	9.4	Fo	2	..	20546b	97	1966	49.7	- 50 54	9.5	9.1	Go	2	..	24143b
48	1436	49.4	- 5 34	8.6	9.6	Ko	3	..	20546b	98	221	49.8	+ 77 34	8.6	9.2	Go	4	..	37558i
49	1348	49.4	- 6 25	9.0	9.5	F8	4	..	20546b	99	1033	49.8	+ 55 54	8.2	8.7	F8	3	..	37407i
50	2582	49.4	- 29 47	10.1	9.8	A2	2	..	44364b	100	932	49.8	+ 10 27	8.2	8.3	A2	2	..	38223i

THE HENRY DRAPER CATALOGUE.

39800

5^h 49^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1055	49.8	+ 7 23	0.92	2.27	Ma	..	0,R	28,198	51	1212	50.1	- 7 27	9.6	10.2	Go	1	..	20546b
2	1211	49.8	+ 0 34	8.8	9.8	Ko	3	..	12754b	52	1262	50.1	- 9 12	8.0	8.0	Ao	5	0,10	37625i
3	1114	49.8	- 0 14	9.1	9.1	A	3	..	12754b	53	1321	50.1	-11 48	5.81	6.88	K2	7	..	20485b
4	2515	49.8	-36 17	8.5	9.4	Go	4	0,3	46181b	54	1284	50.1	-17 47	8.2	9.2	Ko	4	..	12632b
5	2273	49.8	-38 57	9.0	9.8	Go	1	..	46181b	55	1297	50.1	-19 43	7.34	7.8	G5	7	..	17395b
6	2241	49.8	-39 32	8.4	9.5	K2	2	..	46181b	56	2764	50.1	-25 4	8.85	9.2	G5	2	..	12664b
7	1925	49.8	-49 37	9.7	9.4	Fo	3	..	15220b	57	2766	50.1	-25 56	9.6	9.6	Ao	2	..	12664b
8	1968	49.8	-50 24	9.7	9.1	F5	2	0,2	24143b	58	2111	50.1	-43 18	11.0	11.2	G5	1	..	20649b
9	534	49.8	-61 27	9.0	9.5	F5	4	..	15147b	59	419	50.1	-72 1	10.1	11.3	K5	1	..	15167b
10	418	49.8	-72 44	6.51	7.9	Ko	9	R	20540b	60	196	50.1	-79 34	9.3	9.7	F5	4	..	20557b
11	338	49.8	-73 30	10.2	10.6	F5	5	R	15167b	61	201	50.2	+81 31	8.9	9.5	Go	2	..	38330i
12	337	49.8	-73 31	10.2	10.6	F5	5	R	15167b	62	1133	50.2	+51 7	8.9	9.4	F8	2	..	37366i
13	839	49.9	+61 7	8.7	9.3	Go	3	..	38154i	63	1205	50.2	+45 53	6.56	7.34	G5	5	..	37391i
14	1333	49.9	+38 34	7.8	7.8	Ao	3	..	37429i	64	1288	50.2	+35 34	7.50	8.85	Mb	3	..	37377i
15	1193	49.9	+33 12	8.0	8.5	F8	3	..	37377i	65	1045	50.2	+29 44	8.6	8.6	B8	3	..	37377i
16	..	49.9	+20 10	var.	var.	Md	..	R	286c	66	952	50.2	+28 56	6.42	6.48	A2	6	R	37377i
17	1212	49.9	-15 44	7.6	7.6	B9	9	..	20485b	67	1136	50.2	+19 21	8.1	8.1	B9	6	..	37568i
18	3526	49.9	-24 20	10.1	10.4	Ko	1	..	45993b	68	1213	50.2	+ 0 51	9.3	9.3	B9	3	..	12754b
19	2588	49.9	-29 2	9.8	10.1	Ko	2	..	42904b	69	1405	50.2	- 2 24	9.4	9.4	Ao	2	..	12754b
20	2811	49.9	-31 43	8.4	9.9	K5	1	..	44364b	70	1213	50.2	- 7 1	9.6	10.0	F5	2	..	20546b
21	2464	49.9	-37 46	9.6	10.5	Ko	2	5,1	46181b	71	2768	50.2	-25 33	7.9	9.2	A3	3	..	12664b
22	2070	49.9	-47 54	9.3	8.1	Ao	4	..	12756b	72	2590	50.2	-29 47	9.1	10.1	K5	1	..	44364b
23	1926	49.9	-49 7	7.9	8.6	G5	4	..	12756b	73	2698	50.2	-30 2	8.6	8.9	F5	5	..	44364b
24	1426	50.0	+49 59	9.4	9.8	F5	1	..	37366i	74	2119	50.2	-41 59	8.0	8.3	Ao	7	..	20649b
25	1324	50.0	+48 24	8.7	8.8	A2	2	..	37366i	75	799	50.2	-52 5	7.1	8.2	Ma	4	..	24143b
26	1304	50.0	+36 8	8.6	8.7	A3	1	..	38124i	76	581	50.2	-58 45	9.4	10.0	G	2	..	18484b
27	1079	50.0	+14 10	8.1	8.9	G5	2	..	37568i	77	357	50.2	-74 48	9.9	10.0	A2	4	..	15162b
28	950	50.0	+12 59	7.7	8.5	G5	4	..	37568i	78	1018	50.3	+52 2	9.2	9.5	Fo	2	..	37366i
29	970	50.0	+11 48	8.3	9.1	G5	2	..	38223i	79	1057	50.3	+17 59	8.3	9.3	Ko	1	..	37568i
30	1113	50.0	+ 8 40	9.3	9.3	Ao	2	..	38223i	80	1035	50.3	+13 59	8.5	9.3	G5	2	..	37568i
31	1067	50.0	+ 6 43	8.8	8.9	A2	2	..	14071i	81	1036	50.3	+13 56	6.48	7.26	G5	..	5,7	56,81
32	1074	50.0	+ 4 41	8.5	9.5	Ko	2	5,2	39866b	82	951	50.3	+12 57	8.3	8.2	B5	5	..	37568i
33	1115	50.0	- 0 30	7.8	8.4	Go	7	..	12754b	83	1115	50.3	+ 8 58	8.5	9.1	Go	3	..	38412b
34	1116	50.0	- 0 57	8.3	9.1	G5	6	..	12754b	84	1075	50.3	+ 4 44	8.2	8.2	Ao	3	..	39866b
35	1210	50.0	- 7 24	9.1	9.5	F5	3	..	20546b	85	1286	50.3	- 4 4	8.5	9.5	Ko	4	..	20546b
36	1211	50.0	- 7 32	9.1	9.1	Ao	4	..	20546b	86	1214	50.3	- 7 9	10.3	10.9	G	2	..	20546b
37	1320	50.0	-11 50	8.6	8.7	A2	4	3,6	18414b	87	1215	50.3	- 7 10	10.3	10.9	G	1	R	20546b
38	2697	50.0	-30 42	9.0	9.0	A2	5	..	44364b	88	1264	50.3	- 9 49	7.46	7.80	F2	9	..	20546b
39	2574	50.0	-35 50	9.4	10.5	Ko	1	..	46181b	89	1323	50.3	-11 20	9.1	9.2	A2	2	..	20581b
40	2520	50.0	-36 52	10.7	9.9	F5	2	3,2	46181b	90	2592	50.3	-29 8	9.1	9.2	F5	3	..	42904b
41	2206	50.0	-45 20	8.0	8.1	A2	7	..	12756b	91	2595	50.3	-29 10	6.17	7.3	F2	10	..	42904b
42	491	50.0	-63 37	8.7	9.1	F5	4	..	15147b	92	2113	50.3	-43 10	10.6	11.3	Ko	1	..	20649b
43	461	50.0	-66 30	9.6	9.7	A2	2	..	18485b	93	2026	50.3	-48 24	9.0	9.5	A2	5	..	12756b
44	463	50.0	-66 56	5.15	5.03	B5	..	0,7 R	28,198	94	419	50.4	+67 0	6.87	6.87	Ao	8	3,7	37545i
45	1335	50.1	+38 16	7.24	8.42	K5	2	..	37429i	95	1308	50.4	+36 23	8.4	8.4	Ao	3	..	38124i
46	1287	50.1	+35 43	8.7	9.3	Go	2	..	38124i	96	1178	50.4	+20 35	8.8	8.8	Ao	1	..	38084i
47	1034	50.1	+25 19	7.71	7.77	A2	4	0,3 R	38084i	97	1022	50.4	+18 4	8.2	9.2	Ko	2	..	37568i
48	1117	50.1	- 0 15	9.6	9.6	A	2	..	12754b	98	1061	50.4	+17 47	8.8	8.9	A2	3	..	37568i
49	1060	50.1	- 1 57	7.32	7.38	A2	7	0,4	12754b	99	1310	50.4	-12 57	7.78	8.28	F8	3	..	20485b
50	1403	50.1	- 2 55	9.8	9.8	Ao	2	..	12754b	100	1228	50.4	-18 52	8.6	8.9	Fo	4	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39900

5^h 50^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2205	50.4	-42 57	6.34	7.7	Ko	8	..	20649b	51	1062	50.8	+ 7 29	8.8	9.1	Fo	4	..	38412b
2	507	50.4	-65 17	7.96	8.2	Ao	7	0,3	18485b	52	1087	50.8	+ 2 26	9.1	9.2	A3	2	1,2	39866b
3	516	50.4	-67 5	9.0	9.0	Ao	6	..	18485b	53	1218	50.8	+ 0 49	7.6	7.6	Ao	8	..	39866b
4	529	50.4	-69 49	9.5	9.8	F2	5	0,2	15167b	54	1122	50.8	- 0 53	8.4	9.2	G5	5	..	12754b
5	1073	50.5	+46 41	7.8	8.2	F5	2	..	37366i	55	1411	50.8	- 2 14	10.3	10.3	A	2	..	12754b
6	1062	50.5	+31 1	9.5	9.5	A	1	R	37377i	56	1292	50.8	- 4 6	9.1	9.2	A2	5	..	20546b
7	971	50.5	+11 31	7.9	7.9	B9	5	..	37568i	57	1221	50.8	- 7 28	8.4	8.4	Ao	6	..	20546b
8	1064	50.5	- 1 5	9.1	9.2	A2	5	..	12754b	58	1220	50.8	- 7 41	7.8	8.8	Ko	5	..	20546b
9	1409	50.5	- 2 30	9.0	10.2	K5	1	..	12754b	59	1253	50.8	- 8 49	9.1	10.1	Ko	3	..	20546b
10	1289	50.5	- 4 38	5.98	6.98	Ko	6	..	37625i	60	2774	50.8	-25 28	8.8	9.5	Go	2	..	12664b
11	1288	50.5	- 4 50	7.10	7.10	Ao	6	..	37625i	61	2144	50.8	-40 1	9.55	9.8	G5	2	..	20649b
12	1439	50.5	- 5 41	9.8	9.8	B9	2	..	20546b	62	2215	50.8	-42 15	8.4	8.0	F2	8	..	20649b
13	1298	50.5	-21 17	8.6	8.9	K5	4	..	17395b	63	486	50.8	-64 4	6.42	7.3	Ko	8	R	38371b
14	2772	50.5	-25 17	8.8	10.3	K5	2	..	17395b	64		50.8	-64 4			A3			
15	2470	50.5	-37 33	7.32	7.6	A2	5	2,4	12665b	65	1019	50.9	+52 30	9.0	9.8	G5	2	..	37366i
16	2122	50.5	-41 49	10.7	10.4	Go	1	..	20649b	66	1220	50.9	+47 24	8.9	8.9	Ao	2	0,1	37366i
17	2114	50.5	-43 35	7.6	8.5	Go	6	..	20649b	67	1450	50.9	+42 50	8.0	8.5	F8	2	..	37429i
18	2077	50.5	-47 59	7.2	7.5	K2	8	..	12756b	68	1466	50.9	+40 48	8.1	8.2	A5	2	..	37429i
19	956	50.5	-56 29	7.4	8.3	Ko	6	..	18484b	69	1197	50.9	+33 7	8.4	8.5	A3	3	..	37377i
20	355	50.5	-76 12	9.5	9.8	Fo	6	..	15162b	70	1033	50.9	+24 14	6.02	5.85	B3	7	1,7 R	38084i
21	884	50.6	+58 53	8.9	8.9	Ao	3	..	37407i	71	1026	50.9	+18 21	8.9	8.9	Ao	3	..	37568i
22	1209	50.6	+45 6	8.17	9.17	Ko.	1	..	37428i	72	1325	50.9	-11 15	9.8	9.8	Ao	2	..	20581b
23	1337	50.6	+38 37	7.83	9.01	K5	2	..	37429i	73	2616	50.9	-33 48	9.0	9.5	G5	4	..	44364b
24	1290	50.6	+36 1	8.2	8.3	A3	3	..	38124i	74	2216	50.9	-42 2	9.7	10.3	G5	1	..	20649b
25	1063	50.6	+30 35	7.8	9.0	K5	2	..	37377i	75	2218	50.9	-45 43	9.1	9.6	Ko	3	..	12756b
26	1060	50.6	+ 7 50	8.3	8.3	Ao	5	..	38412b	76	800	50.9	-52 32	9.1	9.4	Ko	1	..	24143b
27	1291	50.6	- 4 49	6.22	6.22	Ao	8	..	37625i	77	904	50.9	-57 55	9.6	9.6	A	2	..	18484b
28	1288	50.6	-16 59	9.1	9.7	Go	5	..	12632b	78	903	50.9	-57 56	8.3	8.9	G5	3	..	18484b
29	1259	50.6	-22 51	9.1	9.0	A2	4	..	17395b	79	495	50.9	-63 33	8.1	8.2	A3	9	..	15147b
30	2820	50.6	-31 10	8.0	9.5	Ko	4	..	44364b	80	530	50.9	-69 43	8.8	10.0	K5	3	5,1	15167b
31	2521	50.6	-34 20	8.8	10.4	K5	1	..	46181b	81	114	50.9	-83 20	8.4	9.0	Go	5	..	20557b
32	2580	50.6	-35 56	6.78	7.3	F2	8	3,8	9061b	82	1365	51.0	+37 31	7.56	8.63	K2	2	..	38124i
33	2143	50.6	-40 26	10.0	9.9	F8	2	..	20649b	83	1109	51.0	+22 50	var.	var.	Mb	2	0,2 R	38084i
34	2210	50.6	-42 29	10.3	9.5	F5	3	..	20649b	84	989	51.0	+15 59	8.9	9.0	A2	3	..	37568i
35	2215	50.6	-45 34	9.0	8.7	Ao	5	..	12756b	85	1016	51.0	+ 9 29	6.01	5.99	B9	8	..	38223i
36	958	50.6	-56 14	8.8	8.9	A2	5	..	18484b	86	1078	51.0	+ 4 54	9.40	9.40	Ao	2	..	38412b
37	901	50.6	-57 11	5.95	7.3	F5	..	0,10	56,121	87	1077	51.0	+ 3 51	8.1	8.5	F5	2	..	39866b
38	1292	50.7	+35 46	7.9	8.7	G5	3	..	38124i	88	1161	51.0	+ 1 47	9.3	9.4	A2	4	E	12754b
39	1136	50.7	+32 41	8.0	8.0	B9	4	..	37377i	89	1412	51.0	- 2 48	8.8	8.8	Ao	4	..	12754b
40	1061	50.7	+ 7 44	8.9	9.3	F5	4	..	38412b	90	1222	51.0	- 7 40	8.4	8.4	Ao	7	..	20546b
41	1070	50.7	+ 6 36	9.6	9.6	Ao	2	..	38412b	91	1268	51.0	- 9 25	9.1	9.4	Fo	3	..	20546b
42	1266	50.7	- 9 53	8.76	8.84	A3	5	..	20546b	92	1267	51.0	- 9 56	9.41	9.97	Go	2	..	20546b
43	3230	50.7	-23 58	9.3	9.2	Ko	3	..	17395b	93	1318	51.0	-10 52	9.1	10.1	K	1	E	20581b
44	2773	50.7	-25 36	9.3	10.1	F5	2	..	45993b	94	1302	51.0	-21 27	9.6	8.9	Ao	4	R	17395b
45	2558	50.7	-26 41	6.81	7.7	A3	9	..	12664b	95	2617	51.0	-33 38	8.8	9.2	Go	4	..	44364b
46	2613	50.7	-33 54	8.2	9.2	Ko	4	0,2	44364b	96	2582	51.0	-35 6	8.10	8.7	Fo	4	0,3	12665b
47	1392	50.8	+43 12	8.2	9.2	Ko	2	..	38935i	97	2127	51.0	-41 22	8.1	8.9	F8	6	..	20649b
48	1218	50.8	+34 9	9.4	9.4	Ao	2	E	38124i	98	2219	51.0	-45 57	10.3	10.2	A3	2	..	12756b
49	923	50.8	+27 18	7.7	8.5	G5	4	..	37377i	99	1663	51.0	-51 5	9.2	9.4	K2	2	..	24143b
50	1051	50.8	+21 44	9.1	9.4	F	1	..	38084i	100	305	51.1	+73 5	8.5	8.6	A2	4	..	37343i

THE HENRY DRAPER CATALOGUE.

40000

5^h 51^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1199	51.1	+33 15	7.43	7.93	F8	5	..	37377i	51	2623	51.3	-33 41	8.4	9.0	Ko	2	..	10682b
2	1011	51.1	+26 51	8.0	9.1	K2	2	E	37440i	52	2149	51.3	-40 4	10.9	10.1	A2	2	..	20649b
3	1119	51.1	+23 25	8.6	9.1	F8	2	..	38084i	53	2218	51.3	-42 40	10.3	10.1	Ko	2	..	20649b
4	1031	51.1	+18 22	8.9	8.9	Ao	2	..	37568i	54	2318	51.3	-44 42	9.9	9.6	Go	4	..	20649b
5	926	51.1	+16 21	6.91	6.74	B3	8	..	37568i	55	247	51.4	+75 35	6.52	7.70	K5	6	3,6	37343i
6	991	51.1	+15 4	7.59	8.59	Ko	3	..	37568i	56	1319	51.4	+41 45	8.1	8.1	B9	4	..	37429i
7	936	51.1	+10 33	8.9	9.7	G5	1	..	38412b	57	1056	51.4	+21 59	9.1	9.7	Go	2	..	38084i
8	1221	51.1	+ 0 9	9.3	10.1	G5	1	..	12754b	58	1441	51.4	- 5 54	9.4	10.0	Go	3	..	20546b
9	1413	51.1	- 2 12	8.6	8.6	Ao	3	..	12754b	59	1226	51.4	- 7 34	10.3	10.9	Go	2	..	20546b
10	1414	51.1	- 2 49	9.1	9.4	Fo	4	..	12754b	60	1236	51.4	-18 1	8.8	9.6	G5	3	..	12632b
11	1238	51.1	- 3 49	8.6	8.6	B8	7	1,2	20546b	61	619	51.5	+63 37	8.7	9.3	Go	3	..	38154i
12	1256	51.1	- 8 45	9.1	9.2	A5	3	..	20546b	62	1036	51.5	+55 19	6.48	6.54	A2	6	1,7 R	37366i
13	1216	51.1	-15 30	9.8	10.3	F8	2	..	12632b	63	976	51.5	+53 33	8.8	9.6	G5	1	..	37366i
14	1293	51.1	-17 12	10.0	10.0	Ao	2	..	12632b	64	1212	51.5	+45 50	7.8	8.6	G5	2	..	37428i
15	1292	51.1	-17 56	9.4	9.4	Ao	2	..	12632b	65	1039	51.5	+24 36	7.31	7.26	B8	5	E	37446i
16	3543	51.1	-24 34	9.8	10.1	Ko	1	..	45993b	66	997	51.5	+15 12	8.7	9.7	Ko	1	..	37568i
17	2618	51.1	-33 58	9.3	9.5	Go	3	..	44364b	67	1070	51.5	- 1 50	8.47	8.47	Ao	4	..	12754b
18	961	51.1	-56 32	9.2	10.2	K	1	..	18484b	68	1270	51.5	- 9 56	9.01	9.01	Ao	4	..	20546b
19	1187	51.2	+20 59	8.4	8.5	A2	5	..	37446i	69	1328	51.5	-11 41	9.1	9.2	A2	4	..	20581b
20	975	51.2	+11 30	6.08	6.86	G5	7	..	37568i	70	1329	51.5	-11 57	10.0	10.0	Ao	1	E	20581b
21	937	51.2	+10 17	9.1	9.1	Ao	2	..	38412b	71	1305	51.5	-13 8	7.84	7.82	B9	4	..	20485b
22	1118	51.2	+ 8 17	9.3	9.3	Ao	2	..	38412b	72	1220	51.5	-15 26	9.1	9.7	Go	2	..	12632b
23	1326	51.2	-11 40	8.6	9.1	F8	6	..	20581b	73	1219	51.5	-15 55	8.6	9.7	K2	2	..	12632b
24	1327	51.2	-11 56	9.8	9.9	A5	1	E	20581b	74	3244	51.5	-23 36	11.3	11.1	Ma	1	..	45993b
25	1217	51.2	-15 12	9.0	9.1	A3	4	..	12632b	75	3247	51.5	-23 45	9.8	8.6	A2	4	2,2	17395b
26	3545	51.2	-24 39	9.4	9.8	Ko	2	..	45993b	76	2595	51.5	-27 58	9.1	9.5	F5	2	..	42904b
27	2602	51.2	-29 7	9.6	9.9	Ko	2	..	42904b	77	2624	51.5	-33 57	8.7	9.0	F5	3	..	10682b
28	2710	51.2	-30 20	7.5	8.0	B9	8	..	42904b	78	2286	51.5	-38 16	8.7	9.5	K5	3	..	20649b
29	2832	51.2	-31 38	9.6	9.9	F2	2	..	44364b	79	2085	51.5	-47 12	7.6	8.2	Ko	5	..	12756b
30	2031	51.2	-48 8	9.2	9.4	G5	3	..	12756b	80	383	51.6	+70 38	9.2	9.3	A5	1	..	38169i
31	537	51.2	-62 33	9.2	9.2	B9	6	..	15147b	81	842	51.6	+61 21	9.5	9.6	A2	1	..	38154i
32	442	51.2	-68 27	8.8	10.0	K5	2	..	18485b	82	930	51.6	+59 53	8.01	9.08	K2	2	..	37407i
33	307	51.3	+73 53	8.9	9.0	A3	2	..	37343i	83	971	51.6	+54 33	6.26	7.26	Ko	4	0,4	37366i
34	507	51.3	+65 31	6.74	6.82	A3	6	2,9	36654i	84	1428	51.6	+49 55	6.07	6.85	G5	6	5,5	37428i
35	970	51.3	+54 17	3.88	4.88	Ko	..	5,R	2616c	85	1341	51.6	+38 53	7.27	8.34	K2	4	..	37429i
36	1021	51.3	+52 24	8.5	9.3	G5	2	..	37366i	86	939	51.6	+10 13	8.27	8.61	F2	3	..	38223i
37	1469	51.3	+40 47	7.62	7.68	A2	5	..	37429i	87	1074	51.6	+ 6 55	8.1	8.2	A2	3	..	14071i
38	957	51.3	+28 17	8.5	8.5	Ao	3	..	37377i	88	1263	51.6	- 8 35	9.8	9.8	Ao	2	..	20546b
39	1145	51.3	+19 11	7.9	7.9	B9	7	..	37568i	89	1221	51.6	-15 31	8.4	9.2	G5	3	..	20485b
40	993	51.3	+15 45	7.9	8.5	Go	4	..	37568i	90	1301	51.6	-19 10	9.1	8.9	A3	5	..	17395b
41	956	51.3	+12 21	8.9	9.3	F5	2	..	38223i	91	2260	51.6	-39 59	5.63	7.5	K5	..	0,10	56,121
42	1351	51.3	- 6 47	9.1	9.7	Go	2	..	20546b	92	340	51.6	-73 39	9.9	10.0	A2	3	..	24561b
43	1258	51.3	- 8 37	9.4	9.8	F5	3	..	20546b	93	267	51.7	+74 30	8.2	9.6	Ma	2	..	37343i
44	1319	51.3	-10 7	9.06	9.06	Ao	5	..	20546b	94	418	51.7	+68 29	8.4	9.6	K5	2	E	38112i
45	1301	51.3	-16 49	9.1	9.9	G5	1	..	12632b	95	1429	51.7	+49 38	8.6	8.9	Fo	2	..	37366i
46	1235	51.3	-18 59	7.6	8.6	Ko	5	..	17395b	96	1071	51.7	+17 34	8.9	8.9	Ao	2	..	37568i
47	1261	51.3	-22 40	9.6	9.5	F2	3	..	17395b	97	977	51.7	+11 26	8.4	8.8	F5	3	E	37568i
48	3548	51.3	-24 17	9.3	8.9	A5	5	3,3	17395b	98	1302	51.7	-16 44	8.6	8.6	Ao	4	..	12632b
49	2783	51.3	-25 10	9.10	9.8	Ko	3	..	17395b	99	1298	51.7	-17 53	8.5	9.5	Ko	2	..	12632b
50	2604	51.3	-29 44	8.8	9.5	F8	3	..	42904b	100	1304	51.7	-21 42	6.80	7.4	Go	10	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

40100

5^h 51^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2562	51.7	-28 58	7.84	9.5	Mb	3	..	42904b	51	1269	52.0	-22 52	6.01	7.3	Ko	8	0,10	12664b
2	2479	51.7	-37 14	9.4	9.9	A5	2	..	42917b	52	2841	52.0	-31 54	7.9	8.9	Ko	2	..	10682b
3	2155	51.7	-40 26	9.6	11.0	K5	1	R	20649b	53	2267	52.0	-39 31	10.7	9.8	F5	3	..	20649b
4	2074	51.7	-46 40	9.2	9.6	A2	3	..	12756b	54	2227	52.0	-42 49	9.9	9.8	G5	3	..	20649b
5	1977	51.7	-50 24	6.50	7.2	Ko	8	5,8	12756b	55	1669	52.0	-51 52	9.0	9.2	Ko	3	..	15220b
6	538	51.7	-62 34	9.6	10.6	K	1	..	15147b	56	534	52.0	-69 56	7.76	8.2	F2	4	0,6-	9062b
7	420	51.7	-72 27	9.8	10.6	G5	2	..	15167b	57	356	52.0	-76 8	9.1	10.1	Ko	4	..	15162b
8	801	51.8	+62 19	8.0	9.0	Ko	3	..	38154i	58	190	52.1	+80 2	9.02	9.02	Ao	3	..	37558i
9	973	51.8	+54 23	8.6	8.6	Ao	4	2,4	37407i	59	407	52.1	+67 19	8.4	8.4	Ao	4	E	37545i
10	958	51.8	+28 11	8.8	8.8	B8	2	..	37377i	60	1075	52.1	+46 31	7.24	7.12	B5	5	0,4	38935i
11	1052	51.8	+25 57	4.90	4.71	B2	..	2,9	56,81	61	1374	52.1	+37 35	8.5	8.5	Ao	2	..	37429i
12	1036	51.8	+18 58	8.4	8.5	A2	4	2,3	37568i	62	1375	52.1	+37 4	8.5	8.5	B9	3	..	38124i
13	1088	51.8	+14 3	7.03	8.10	K2	4	..	37568i	63	1058	52.1	+29 37	7.81	7.79	B9	4	..	37377i
14	1052	51.8	+13 42	8.1	8.1	B9	6	..	37568i	64	1018	52.1	+26 12	9.0	9.1	A3	2	..	37440i
15	1075	51.8	+6 46	8.3	8.8	F8	1	..	39866b	65	1020	52.1	+9 35	8.7	8.7	Ao	3	..	38171i
16	1124	51.8	-0 23	9.3	9.9	Go	1	..	39866b	66	1076	52.1	+6 23	7.9	7.9	Ao	3	..	14071i
17	1073	51.8	-1 10	8.2	8.2	B9	8	..	12754b	67	1417	52.1	-2 32	9.1	9.2	A5	3	..	12754b
18	1227	51.8	-7 39	9.1	9.1	B9	5	..	20546b	68	1265	52.1	-8 24	6.87	7.65	G5	8	..	20546b
19	1321	51.8	-10 39	8.0	8.0	Ao	7	..	20581b	69	1323	52.1	-10 7	9.01	9.07	A2	5	..	20546b
20	1330	51.8	-11 17	8.0	9.1	K2	5	..	20485b	70	1232	52.1	-20 2	8.38	8.6	Go	4	..	17395b
21	1287	51.8	-14 38	9.8	9.8	Ao	2	..	12632b	71	1233	52.1	-20 21	9.0	9.2	A5	3	..	17395b
22	1306	51.8	-21 2	9.6	9.2	Go	2	..	17395b	72	1311	52.1	-21 39	9.4	9.6	A5	3	..	17395b
23	3253	51.8	-23 28	10.1	9.2	F8	3	..	17395b	73	3557	52.1	-24 6	7.65	9.0	K5	4	0,3	17395b
24	3552	51.8	-24 52	10.1	10.3	A5	2	..	45993b	74	2575	52.1	-26 51	9.0	9.8	G5	1	..	42904b
25	2613	51.8	-29 9	7.80	8.6	F2	5	..	42904b	75	2618	52.1	-29 53	9.40	9.2	B9	3	..	42904b
26	2614	51.8	-29 56	7.90	8.3	F8	5	..	42904b	76	2487	52.1	-37 8	5.02	6.7	Ko	..	0,R	28,198
27	2615	51.8	-29 59	8.34	9.2	Ko	2	..	42904b	77	2293	52.1	-38 34	10.7	9.5	Go	2	..	20649b
28	2534	51.8	-36 58	10.0	10.4	A3	1	..	46181b	78	2159	52.1	-40 42	9.1	9.8	Go	2	..	20649b
29	964	51.8	-56 42	8.6	8.7	G5	4	..	18484b	79	961	52.1	-53 44	8.8	9.6	F2	2	..	24143b
30	387	51.8	-71 23	9.2	10.0	G5	4	..	15167b	80	460	52.1	-70 49	10.7	10.8	A5	3	..	15167b
31	1074	51.9	+46 55	7.9	7.9	Ao	4	2,3	38935i	81	345	52.1	-75 3	9.48	9.4	Ao	5	..	15162b
32	1043	51.9	+24 37	7.96	7.91	B8	3	E	37446i	82	509	52.2	+65 3	7.45	8.45	Ko	6	5,4	38154i
33	959	51.9	+12 53	8.9	8.9	B8	2	..	37568i	83	1328	52.2	+44 56	2.07	2.07	Aop	..	R	28,198
34	1241	51.9	-3 5	8.6	8.6	Ao	5	..	12754b	84	1472	52.2	+40 2	7.37	7.79	F5	4	..	37429i
35	1228	51.9	-7 57	9.1	10.1	Ko	2	..	20546b	85	1093	52.2	+14 57	8.84	8.84	Ao	3	..	37568i
36	1286	51.9	-14 11	3.77	4.05	Fo	..	R	1670c	86	1091	52.2	+14 41	7.8	8.4	Go	4	..	37568i
37	1300	51.9	-17 15	8.0	8.3	Fo	5	..	12632b	87	1123	52.2	+8 4	9.6	10.2	Go	1	..	38412b
38	1307	51.9	-21 9	6.96	6.7	Ao	10	..	17395b	88	1082	52.2	+4 59	7.71	7.85	A5	3	..	14071i
39	2132	51.9	-41 40	8.7	8.3	Ao	7	..	20649b	89	1266	52.2	-8 45	9.1	9.4	Fo	4	..	20546b
40	420	52.0	+66 53	7.7	8.9	K5	4	5,3	37545i	90	1275	52.2	-9 49	9.01	10.08	K2	3	..	20546b
41	1083	52.0	+56 54	7.57	8.35	G5	4	..	37407i	91	1333	52.2	-11 46	9.1	9.9	G5	2	E	20581b
42	1023	52.0	+52 20	8.6	8.9	Fo	3	..	37366i	92	1306	52.2	-13 10	7.8	8.3	F8	3	..	20485b
43	1216	52.0	+45 37	6.60	6.60	Ao	5	..	37391i	93	1270	52.2	-22 39	9.1	8.6	B8	5	..	17395b
44	1053	52.0	+25 34	8.4	9.4	Ko	2	0,2	37440i	94	3259	52.2	-23 23	10.3	9.8	Go	2	..	17395b
45	1416	52.0	-2 10	8.6	8.9	Fo	5	..	12754b	95	2844	52.2	-31 33	6.75	6.6	B9	8	..	9061b
46	1243	52.0	-3 46	9.6	9.6	Ao	3	..	20546b	96	2538	52.2	-34 27	8.7	9.6	Fo	5	..	44364b
47	1274	52.0	-9 19	8.0	8.8	G5	4	..	20546b	97	2134	52.2	-41 26	10.0	10.4	G5	1	..	20649b
48	1303	52.0	-17 50	9.1	9.1	B8	4	..	12632b	98	2135	52.2	-41 54	10.7	10.4	Go	1	..	20649b
49	1309	52.0	-21 30	8.4	8.3	G5	7	..	17395b	99	2089	52.2	-47 40	8.6	8.5	Go	5	..	12756b
50	1268	52.0	-22 17	8.8	8.3	F8	6	..	17395b	100	1945	52.2	-49 39	6.16	6.2	B5	10	..	24143b

THE HENRY DRAPER CATALOGUE.

40200

5^h 52^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	541	52.2	-61 52	6.94	7.7	Ao	7	..	20516b	51	2227	52.5	-45 50	8.1	8.5	Ko	5	..	12756b
2	557	52.3	+64 58	8.80	9.36	Go	3	..	38154i	52	219	52.5	-77 36	10.4	10.5	A3	3	..	15162b
3	1038	52.3	+55 32	8.7	9.2	F8	3	..	37407i	53	1431	52.6	+49 59	9.12	9.40	Fo	2	..	37366i
4	1139	52.3	+51 4	6.63	6.63	Ao	7	1.6	37366i	54	1154	52.6	+31 2	9.4	9.4	B8	1	..	37377i
5	1329	52.3	+44 7	7.7	8.7	Ko	2	..	38935i	55	1062	52.6	+29 59	7.06	7.14	A3	6	..	37377i
6	1322	52.3	+41 55	7.82	7.82	Ao	5	..	37429i	56	935	52.6	+27 36	8.2	8.2	B9	3	..	37377i
7	1130	52.3	+23 9	7.53	8.53	Ko	4	..	37446i	57	1003	52.6	+15 49	8.7	8.8	A2	2	..	37568i
8	1230	52.3	+0 24	8.9	8.9	A	7	..	12754b	58	1023	52.6	+9 56	8.22	8.64	F5	3	..	38223i
9	1229	52.3	+0 23	9.3	9.3	A	7	..	12754b	59	1096	52.6	+2 4	8.3	8.6	Fo	6	2.6	12754b
10	1227	52.3	+0 1	6.82	6.82	Ao	7	..	38205i	60	1420	52.6	-2 39	8.6	8.9	Fo	5	..	12754b
11	1418	52.3	-2 30	9.0	9.8	G5	2	..	12754b	61	1447	52.6	-5 57	9.8	9.8	B8	2	..	20546b
12	1354	52.3	-6 12	8.6	9.0	F5	5	..	20546b	62	1357	52.6	-6 23	9.6	10.0	F5	2	..	20546b
13	3262	52.3	-23 25	9.6	9.8	Ko	1	..	17395b	63	1336	52.6	-11 50	9.4	10.0	Go	2	..	20581b
14	3558	52.3	-24 41	10.3	10.1	Go	2	..	45993b	64	1243	52.6	-18 36	9.4	9.9	F8	1	..	12632b
15	2630	52.3	-33 45	10.0	9.2	Go	3	..	44364b	65	1236	52.6	-20 40	9.1	8.9	Ao	4	..	17395b
16	2296	52.3	-38 7	7.41	7.7	F5	10	..	20649b	66	1312	52.6	-21 47	9.0	8.9	Fo	4	..	17395b
17	2161	52.3	-40 46	10.4	9.9	Go	2	..	20649b	67	1271	52.6	-22 18	9.6	9.2	B8	3	..	17395b
18	2136	52.3	-41 6	10.2	10.4	Ko	1	..	20649b	68	2586	52.6	-26 47	9.1	9.6	A2	2	..	42904b
19	2327	52.3	-44 35	8.7	9.0	F5	4	..	20649b	69	2611	52.6	-27 4	9.1	9.5	F8	3	..	42904b
20	1947	52.3	-49 1	9.3	9.4	F5	4	0.4	12756b	70	2299	52.6	-38 39	9.0	10.4	K5	1	..	20649b
21	967	52.3	-56 12	9.0	9.2	A2	5	..	18484b	71	2162	52.6	-40 16	9.4	9.5	G5	2	..	20649b
22	543	52.3	-61 25	9.0	8.6	Ao	7	..	15147b	72	2233	52.6	-42 42	10.1	9.8	F5	3	..	20649b
23	388	52.3	-71 54	9.7	10.3	Go	4	..	15167b	73	1671	52.6	-51 1	7.9	7.7	F2	6	..	24143b
24	154	52.3	-81 10	9.0	10.0	Ko	2	..	20557b	74	964	52.6	-53 36	7.8	8.3	A3	6	..	24143b
25	311	52.4	+74 1	7.34	7.84	F8	5	..	37343i	75	506	52.6	-60 6	9.34	10.1	G5	2	..	15147b
26	978	52.4	+53 13	9.4	10.5	K2	..	..	M	76	539	52.6	-62 50	9.8	9.9	A2	2	..	15147b
27	963	52.4	+12 53	8.3	8.3	B9	6	..	37568i	77	462	52.6	-70 30	8.5	8.6	A2	3	3.9	9062b
28	1124	52.4	+8 14	8.7	9.0	Fo	3	..	38412b	78	1331	52.7	+48 53	8.7	8.7	Ao	3	..	38935i
29	1068	52.4	+7 30	9.6	10.1	F8	1	..	38412b	79	1330	52.7	+48 14	8.4	8.4	Ao	4	0.3	37428i
30	1069	52.4	+7 22	9.3	9.6	Fo	2	..	38412b	80	1058	52.7	+25 46	6.61	7.61	Ko	..	0.4	56.81
31	1300	52.4	-4 0	9.8	10.2	F5	2	..	20546b	81	965	52.7	+12 59	8.5	9.5	Ko	2	..	37568i
32	1231	52.4	-7 18	9.8	9.8	Ao	2	..	20546b	82	1168	52.7	+1 13	6.49	7.56	K2	7	2.4	39866b
33	1325	52.4	-10 52	7.8	8.8	Ko	5	..	20581b	83	1075	52.7	-1 49	9.3	9.3	B9	4	..	12754b
34	1240	52.4	-18 18	7.8	7.9	A2	7	..	12632b	84	1273	52.7	-22 55	10.3	9.8	Go	2	..	17395b
35	3263	52.4	-23 14	6.41	7.8	Ko	7	0.10	12664b	85	2301	52.7	-38 18	9.0	8.7	Ao	7	..	20649b
36	2847	52.4	-31 3	9.8	9.8	Ao	3	..	44364b	86	2167	52.7	-40 19	10.9	10.3	Go	1	..	20649b
37	2596	52.4	-35 7	8.60	9.9	K2	3	0.2	46181b	87	2139	52.7	-41 28	11.4	10.4	A	1	..	20649b
38	2597	52.4	-35 20	9.4	10.4	A3	3	..	46181b	88	2138	52.7	-41 44	10.2	9.8	Go	3	..	20649b
39	1217	52.5	+45 56	4.59	5.94	Ma	7	0.7 R	37428i	89	2328	52.7	-44 48	10.1	9.9	F5	2	..	20649b
40	1402	52.5	+43 59	7.9	8.9	Ko	1	..	38935i	90	2095	52.7	-47 44	9.1	9.9	Ko	1	..	12756b
41	1045	52.5	+24 48	7.61	8.39	G5	3	..	37446i	91	1949	52.7	-49 40	8.4	8.8	Ko	3	0.2	12756b
42	1132	52.5	+23 39	7.8	9.2	Ma	2	..	37446i	92	805	52.7	-52 40	5.30	6.1	A5	..	..	28.198
43	1063	52.5	+21 29	8.6	8.7	A2	3	..	37446i	93	903	52.7	-55 52	8.9	9.8	Ko	2	..	18484b
44	1095	52.5	+2 35	9.1	9.4	Fo	3	5.3	39866b	94	507	52.7	-60 40	9.7	10.5	G5	3	..	15147b
45	1267	52.5	-8 26	9.1	9.2	A2	3	..	20546b	95	389	52.7	-72 0	10.2	10.3	A2	3	2.2	15167b
46	1309	52.5	-13 16	10.3	10.3	A	2	..	20581b	96	357	52.7	-76 34	9.4	10.6	K5	4	..	20652b
47	2584	52.5	-26 33	8.0	9.0	Fo	4	..	42904b	97	938	52.8	+27 33	7.9	7.9	B9p	5	R	37377i
48	2848	52.5	-31 24	5.54	5.9	Fo	9	R	56.121	98	1066	52.8	+21 14	8.6	8.6	B9	4	..	37446i
49	2543	52.5	-34 17	9.3	10.5	K5	1	..	44364b	99	1197	52.8	+20 44	9.0	9.6	Go	2	..	37446i
50	2226	52.5	-45 36	9.2	9.6	Ko	2	..	12756b	100	1077	52.8	+6 31	8.1	8.6	F8	2	..	39866b

40100

5^h 52^m.8

H.D.	DM.	R.A.	Dec. 1900	Pl. No.	Sp.	Int.	Rem.	Pl. No.
10	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
11	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
12	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
13	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
14	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
15	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
16	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
17	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
18	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
19	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
20	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
21	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
22	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
23	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
24	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
25	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
26	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
27	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
28	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
29	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
30	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
31	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
32	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
33	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
34	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
35	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
36	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
37	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
38	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
39	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
40	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
41	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
42	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
43	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
44	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
45	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
46	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
47	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
48	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
49	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b
50	14.12	52.0 + 37 12	2.71	2.71	Ko	3	..	20546b

THE HENRY DRAPER CATALOGUE.

40400

5^h 53^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1239	53.4	-20 32	9.1	9.0	F5	4	..	17395b	51	2627	53.7	-27 43	9.3	10.1	Ko	1	..	42904b
2	2620	53.4	-27 21	8.2	9.5	G5	3	..	42904b	52	2664	53.7	-32 9	9.3	9.8	A5	2	..	44364b
3	2592	53.4	-28 27	8.8	9.5	G5	2	..	42904b	53	2666	53.7	-32 35	10.0	9.8	A2	1	..	44364b
4	2591	53.4	-28 53	8.6	8.6	F5	5	..	42904b	54	969	53.7	-56 0	9.1	9.6	F8	2	..	18484b
5	2549	53.4	-36 22	8.4	9.4	Ao	3	..	42917b	55	495	53.7	-64 30	6.62	6.7	F2	5	2,8	42853b
6	2171	53.4	-40 0	9.0	9.3	A2	4	..	20649b	56	118	53.8	+84 12	8.9	9.4	F8	3	..	38330i
7	971	53.4	-53 33	9.2	9.5	Fo	3	..	24143b	57	1304	53.8	+35 19	7.82	8.24	F5	3	..	38124i
8	593	53.4	-58 10	8.3	9.1	A5	4	..	18484b	58	1231	53.8	+34 30	6.82	7.82	Ko	5	..	37377i
9	498	53.4	-63 8	4.53	6.0	Ko	..	..	28,198	59	1158	53.8	+31 57	7.24	8.24	Ko	5	..	37377i
10	164	53.4	-80 21	8.8	8.9	A5	5	..	20557b	60	943	53.8	+27 17	6.83	7.83	Ko	5	..	37377i
11	1347	53.5	+38 34	8.8	9.1	F	2	..	37429i	61	1162	53.8	+19 57	8.75	8.9	F2	..	..	M
12	1082	53.5	+17 49	7.8	8.2	F5	5	..	37568i	62	1163	53.8	+19 54	8.75	8.9	Ao	2	..	37568i
13	1128	53.5	+8 58	8.9	9.3	F5	3	..	38412b	63	975	53.8	+12 29	7.8	8.8	Ko	4	..	37568i
14	1426	53.5	-2 37	9.1	9.7	G	1	..	12754b	64	1332	53.8	-10 51	8.0	8.0	B9	9	..	20581b
15	1456	53.5	-5 3	9.40	9.96	Go	3	..	20546b	65	1314	53.8	-21 29	9.0	8.6	Fo	6	..	17395b
16	1363	53.5	-6 51	9.0	9.1	A2	4	..	20546b	66	2280	53.8	-39 32	9.4	9.5	G5	2	..	20649b
17	1312	53.5	-17 24	9.6	9.7	A5	3	..	12632b	67	2173	53.8	-40 24	10.0	9.2	A5	3	..	20649b
18	1314	53.5	-19 23	7.8	8.3	K2	7	..	17395b	68	905	53.8	-55 49	9.1	9.8	F8	1	..	18484b
19	1276	53.5	-22 26	9.8	9.5	F5	2	..	17395b	69	298	53.9	+72 25	8.5	8.5	Ao	2	..	37343i
20	2624	53.5	-27 47	8.2	9.5	G5	2	..	42904b	70	1225	53.9	+45 10	7.57	7.57	Ao	3	..	37428i
21	1436	53.6	+49 30	8.1	8.4	Fo	3	5.3	37366i	71	1409	53.9	+43 41	8.4	8.5	A2	2	E	37397i
22	1224	53.6	+45 10	8.37	8.87	F8	1	..	38935i	72	1081	53.9	-1 7	8.2	9.4	K5	2	..	12754b
23	1130	53.6	+22 28	7.36	7.36	Ao	6	..	37446i	73	1080	53.9	-1 20	8.5	8.5	B9	4	..	12754b
24	1160	53.6	+19 46	8.7	8.7	B9	3	..	37446i	74	1458	53.9	-5 33	9.0	9.1	A5	4	..	20546b
25	1161	53.6	+19 1	8.9	8.9	Ao	2	..	37568i	75	1364	53.9	-6 27	9.8	9.8	Ao	3	..	20546b
26	1046	53.6	+18 52	7.47	7.47	Ao	5	0.7	37446i	76	1345	53.9	-11 3	8.6	8.6	Ao	5	..	20581b
27	1065	53.6	+13 43	8.2	8.2	B9	4	..	37568i	77	1254	53.9	-17 59	8.7	9.7	Ko	2	..	12632b
28	971	53.6	+12 54	8.9	8.9	Ao	2	..	37568i	78	1253	53.9	-18 47	9.1	9.9	G5	1	..	12632b
29	1427	53.6	-2 6	8.6	8.6	Ao	6	..	12754b	79	2605	53.9	-26 52	8.2	10.3	K5	1	..	42904b
30	1331	53.6	-10 53	8.6	9.6	Ko	4	..	20581b	80	2642	53.9	-29 12	8.8	9.8	Ko	1	..	42904b
31	1342	53.6	-11 25	9.6	10.4	G5	3	..	20581b	81	2554	53.9	-35 1	9.80	10.8	F2	1	..	44364b
32	1325	53.6	-12 11	8.6	8.9	Fo	5	..	20581b	82	2146	53.9	-41 16	10.7	10.7	K5	1	..	20649b
33	3572	53.6	-24 12	9.3	8.9	A3	5	..	17395b	83	2343	53.9	-44 2	6.72	7.1	F5	10	..	20649b
34	540	53.6	-59 38	7.2	8.6	Ko	7	..	15147b	84	542	53.9	-59 56	8.04	9.7	Ko	3	..	15147b
35	449	53.6	-68 28	10.0	10.0	Ao	2	..	18485b	85	540	53.9	-69 7	9.7	10.3	Go	3	..	15167b
36	422	53.6	-72 42	10.2	10.5	F2	3	..	15167b	86	1333	54.0	+48 58	6.24	7.24	Ko	6	0.5	37428i
37	358	53.6	-76 7	9.7	10.5	G5	3	..	15162b	87	1411	54.0	+43 17	7.8	9.0	K5	1	..	38935i
38	1044	53.7	+55 19	8.0	9.2	K5	3	..	37407i	88	1329	54.0	+41 56	7.9	8.3	F5	4	..	37429i
39	1209	53.7	+33 8	6.80	6.86	A2	6	..	37377i	89	1385	54.0	+37 44	8.4	8.5	A2	2	..	37429i
40	965	53.7	+28 45	8.8	9.2	F5	1	..	37440i	90	1037	54.0	+9 15	8.9	8.9	Ao	4	..	38223i
41	966	53.7	+28 8	7.04	8.22	K5	3	..	37377i	91	1133	54.0	+8 24	6.89	7.89	Ko	4	..	38223i
42	1131	53.7	+22 39	9.0	9.0	Ao	2	..	37446i	92	1090	54.0	+4 28	8.1	8.9	G5	3	..	38171i
43	1072	53.7	+21 36	6.68	6.68	Ao	6	..	37446i	93	3291	54.0	-23 49	9.4	10.1	Ko	1	..	17395b
44	1131	53.7	+8 56	8.9	10.1	K5	1	..	38412b	94	2612	54.0	-35 18	4.36	4.19	B3	..	R	28,198
45	1089	53.7	+4 51	8.80	9.58	G5	2	..	38171i	95	2284	54.0	-39 36	9.4	10.1	Ko	2	..	20649b
46	1239	53.7	+0 32	5.25	5.25	Ao	..	0.10	56,81	96	2147	54.0	-41 47	7.6	7.7	F2	8	..	20649b
47	1281	53.7	-9 19	9.8	9.8	B9	3	..	20546b	97	336	54.1	+71 2	8.7	9.3	Go	2	..	38169i
48	1230	53.7	-15 26	9.1	9.1	A	3	R	12632b	98	1350	54.1	+38 5	8.6	9.0	F5	2	..	37429i
49	1316	53.7	-19 57	10.0	9.8	A3	2	..	17395b	99	1431	54.1	-2 50	9.6	9.9	F	2	..	12754b
50	1240	53.7	-20 45	10.0	9.8	G5	2	..	17395b	100	1346	54.1	-11 15	9.1	9.2	A2	6	..	20581b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

40300

5^h 52^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1359	52.8	— 6 5	7.57	8.92	Ma	5	..	20546b	51	1451	53.1	— 5 48	8.8	9.6	G5	6	..	20546b
2	1327	52.8	— 10 49	9.1	9.6	F8	2	..	20581b	52	1450	53.1	— 5 56	10.3	10.3	Ao	1	..	20546b
3	1309	52.8	— 19 13	9.0	9.2	F5	3	..	17395b	53	1360	53.1	— 6 29	9.0	9.1	A2	4	..	20546b
4	2580	52.8	— 28 30	8.6	10.4	K2	1	..	42904b	54	1234	53.1	— 7 23	8.6	8.9	Fo	5	..	20546b
5	2329	52.8	— 44 20	8.5	8.7	F2	5	..	20649b	55	1226	53.1	— 15 25	6.94	6.89	B8	7	..	12632b
6	965	52.8	— 53 33	9.0	9.6	K2	2	..	24143b	56	1309	53.1	— 17 7	9.1	9.4	F2	2	..	12632b
7	508	52.8	— 60 3	7.14	8.3	G5	7	..	15147b	57	1313	53.1	— 21 4	8.7	9.0	Ko	3	..	17395b
8	497	52.8	— 63 20	8.0	8.0	Ao	3	..	42853b	58	2589	53.1	— 28 46	8.0	8.9	Ko	3	..	42904b
9	536	52.8	— 69 49	9.6	10.0	F5	3	..	15167b	59	2854	53.1	— 32 0	6.50	7.3	Ko	5	..	10682b
10	802	52.9	+ 62 29	9.2	9.2	Ao	2	..	38154i	60	2307	53.1	— 38 38	9.4	10.3	K5	1	..	20649b
11	1432	52.9	+ 49 58	7.87	7.93	A2	3	1,4	37428i	61	2232	53.1	— 45 58	9.9	9.9	G5	2	..	12756b
12	1380	52.9	+ 37 12	2.71	2.71	Aop	..	R	2311c	62	2052	53.1	— 48 58	8.7	9.7	Ko	3	..	12756b
13	1322	52.9	+ 36 50	7.9	8.9	Ko	2	..	38124i	63	1674	53.1	— 51 46	10.3	9.7	G5	2	..	15220b
14	1156	52.9	+ 31 4	8.0	8.4	F5	3	..	37377i	64	904	53.1	— 55 15	8.7	9.2	F8	4	..	18484b
15	940	52.9	+ 27 34	9.4	9.4	A	1	..	37377i	65	448	53.1	— 69 0	9.0	10.0	Ko	2	..	18485b
16	940	52.9	+ 16 36	7.18	7.16	B9	8	..	37568i	66	1066	53.2	+ 30 0	8.46	8.54	A3	3	..	37377i
17	1055	52.9	+ 5 49	8.1	8.1	Ao	4	..	39866b	67	1043	53.2	+ 18 49	8.9	8.9	Ao	4	..	37568i
18	1319	52.9	— 12 58	9.1	9.5	F5	3	..	20581b	68	945	53.2	+ 16 22	8.5	8.8	Fo	3	..	37568i
19	2637	52.9	— 33 27	7.14	7.3	Ao	7	..	9061b	69	968	53.2	+ 12 48	5.77	6.55	G5	8	R	38223i
20	2237	52.9	— 42 26	10.3	9.8	Ao	2	..	20649b	70		53.2	+ 12 48			A5			
21	538	52.9	— 59 48	8.9	8.8	F2	4	..	15147b	71	1057	53.2	+ 5 48	8.1	8.2	A2	3	..	14071i
22	220	52.9	— 77 24	9.0	9.8	G5	7	..	15162b	72	1171	53.2	+ 1 49	6.06	6.20	A5	8	E	14071i
23	1141	53.0	+ 51 5	8.9	10.0	K2	1	..	37366i	73	1423	53.2	— 2 2	8.0	8.1	A5	7	5,3	12754b
24	1079	53.0	+ 46 38	8.6	9.0	F5	1	..	37428i	74	1308	53.2	— 4 38	9.4	10.0	Go	2	..	20546b
25	1332	53.0	+ 44 36	6.44	7.22	G5	5	..	37428i	75	1321	53.2	— 12 35	9.8	9.8	Ao	2	..	20581b
26	1404	53.0	+ 43 11	7.8	7.8	B9	4	..	38935i	76	1292	53.2	— 14 12	8.0	9.1	K2	3	..	20485b
27	1324	53.0	+ 36 3	8.0	8.0	Ao	2	..	37429i	77	1227	53.2	— 15 45	9.1	9.7	Go	2	..	12632b
28	1148	53.0	+ 32 48	8.0	8.1	A2	3	..	37377i	78	1309	53.2	— 16 7	9.8	9.8	Ao	2	..	12632b
29	1199	53.0	+ 20 41	8.6	9.4	G5	2	..	37446i	79	1247	53.2	— 18 4	6.92	7.34	F5	9	..	12632b
30	1042	53.0	+ 18 59	8.1	8.7	Go	3	..	37568i	80	2728	53.2	— 30 5	8.65	9.2	Fo	3	..	42904b
31	1040	53.0	+ 18 50	7.12	8.12	Ko	5	..	37568i	81	2169	53.2	— 40 34	8.1	8.4	F5	8	..	20649b
32	950	53.0	+ 10 6	9.07	9.07	A	2	..	38223i	82	1480	53.3	+ 39 53	7.62	8.40	G5	2	..	37429i
33	1072	53.0	+ 7 51	7.3	8.3	Ko	4	..	38411b	83	1087	53.3	+ 4 29	8.5	8.5	B9	3	..	38412b
34	1056	53.0	+ 5 30	8.1	8.2	A5	4	..	39866b	84	1249	53.3	— 18 45	9.1	9.6	F8	3	..	12632b
35	1170	53.0	+ 1 52	7.20	7.20	Ao	4	E	14071i	85	1238	53.3	— 20 48	9.4	9.3	G5	2	..	17395b
36	1232	53.0	— 7 40	8.0	9.0	Ko	5	..	20546b	86	1274	53.3	— 22 11	9.8	9.8	F5	2	..	17395b
37	1237	53.0	— 20 27	10.0	9.8	Ao	2	..	17395b	87	3567	53.3	— 24 59	8.40	8.7	F5	6	..	17395b
38	2594	53.0	— 26 13	9.6	9.8	A5	3	..	42904b	88	2859	53.3	— 31 16	8.8	9.2	Go	2	..	10682b
39	2548	53.0	— 34 46	8.7	9.4	Fo	5	..	44364b	89	2643	53.3	— 33 30	9.6	9.5	F8	3	..	44364b
40	2275	53.0	— 39 10	7.21	8.4	Ko	8	..	20649b	90	2642	53.3	— 33 50	9.4	9.2	F8	4	..	44364b
41	2140	53.0	— 41 15	9.4	8.7	A2	5	..	20649b	91	2276	53.3	— 39 6	8.7	8.9	A3	6	..	20649b
42	493	53.0	— 64 41	8.7	9.7	Ko	3	0,2	15147b	92	209	53.4	+ 78 1	8.6	9.4	G5	4	0,1	37558i
43	447	53.0	— 68 13	10.3	10.3	A	1	..	18485b	93	1435	53.4	+ 49 59	8.72	9.00	Fo	2	..	37366i
44	1221	53.1	+ 45 33	8.9	9.0	A2	1	..	38935i	94	1227	53.4	+ 47 54	5.68	5.68	Ao	8	..	37366i
45	1123	53.1	+ 22 48	8.6	8.6	Ao	5	..	37446i	95	1463	53.4	+ 42 45	8.2	8.7	F8	2	..	37429i
46	1073	53.1	+ 7 57	8.1	9.1	Ko	2	2,2	38412b	96	1007	53.4	+ 15 19	8.3	8.9	Go	3	..	37568i
47	1078	53.1	— 1 1	6.33	7.33	Ko	5	0,9	37625i	97	1310	53.4	— 4 39	6.85	7.41	Go	9	..	20546b
48	1422	53.1	— 2 33	9.1	9.1	Ao	5	..	12754b	98	1323	53.4	— 12 44	9.6	9.6	A	3	..	20581b
49	1306	53.1	— 4 16	9.1	9.5	F5	4	..	20546b	99	1324	53.4	— 12 49	9.1	10.1	Ko	4	..	20581b
50	1305	53.1	— 4 46	8.6	9.6	Ko	4	..	20546b	100	1229	53.4	— 15 43	9.1	9.9	G5	2	..	12632b

THE HENRY DRAPER CATALOGUE.

40400

5^h 53^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1239	53.4	-20 32	9.1	9.0	F5	4	..	17395b	51	2627	53.7	-27 43	9.3	10.1	Ko	1	..	42904b
2	2620	53.4	-27 21	8.2	9.5	G5	3	..	42904b	52	2664	53.7	-32 9	9.3	9.8	A5	2	..	44364b
3	2592	53.4	-28 27	8.8	9.5	G5	2	..	42904b	53	2666	53.7	-32 35	10.0	9.8	A2	1	..	44364b
4	2591	53.4	-28 53	8.6	8.6	F5	5	..	42904b	54	969	53.7	-56 0	9.1	9.6	F8	2	..	18484b
5	2549	53.4	-36 22	8.4	9.4	Ao	3	..	42917b	55	495	53.7	-64 30	6.62	6.7	F2	5	2,8	42853b
6	2171	53.4	-40 0	9.0	9.3	A2	4	..	20649b	56	118	53.8	+84 12	8.9	9.4	F8	3	..	38330i
7	971	53.4	-53 33	9.2	9.5	Fo	3	..	24143b	57	1304	53.8	+35 19	7.82	8.24	F5	3	..	38124i
8	593	53.4	-58 10	8.3	9.1	A5	4	..	18484b	58	1231	53.8	+34 30	6.82	7.82	Ko	5	..	37377i
9	498	53.4	-63 8	4.53	6.0	Ko	..	..	28,198	59	1158	53.8	+31 57	7.24	8.24	Ko	5	..	37377i
10	164	53.4	-80 21	8.8	8.9	A5	5	..	20557b	60	943	53.8	+27 17	6.83	7.83	Ko	5	..	37377i
11	1347	53.5	+38 34	8.8	9.1	F	2	..	37429i	61	1162	53.8	+19 57	8.75	8.9	F2	..	..	M
12	1082	53.5	+17 49	7.8	8.2	F5	5	..	37568i	62	1163	53.8	+19 54	8.75	8.9	Ao	2	..	37568i
13	1128	53.5	+8 58	8.9	9.3	F5	3	..	38412b	63	975	53.8	+12 29	7.8	8.8	Ko	4	..	37568i
14	1426	53.5	-2 37	9.1	9.7	G	1	..	12754b	64	1332	53.8	-10 51	8.0	8.0	B9	9	..	20581b
15	1456	53.5	-5 3	9.40	9.96	Go	3	..	20546b	65	1314	53.8	-21 29	9.0	8.6	Fo	6	..	17395b
16	1363	53.5	-6 51	9.0	9.1	A2	4	..	20546b	66	2280	53.8	-39 32	9.4	9.5	G5	2	..	20649b
17	1312	53.5	-17 24	9.6	9.7	A5	3	..	12632b	67	2173	53.8	-40 24	10.0	9.2	A5	3	..	20649b
18	1314	53.5	-19 23	7.8	8.3	K2	7	..	17395b	68	905	53.8	-55 49	9.1	9.8	F8	1	..	18484b
19	1276	53.5	-22 26	9.8	9.5	F5	2	..	17395b	69	298	53.9	+72 25	8.5	8.5	Ao	2	..	37343i
20	2624	53.5	-27 47	8.2	9.5	G5	2	..	42904b	70	1225	53.9	+45 10	7.57	7.57	Ao	3	..	37428i
21	1436	53.6	+49 30	8.1	8.4	Fo	3	5,3	37366i	71	1409	53.9	+43 41	8.4	8.5	A2	2	E	37397i
22	1224	53.6	+45 10	8.37	8.87	F8	1	..	38935i	72	1081	53.9	-1 7	8.2	9.4	K5	2	..	12754b
23	1130	53.6	+22 28	7.36	7.36	Ao	6	..	37446i	73	1080	53.9	-1 20	8.5	8.5	B9	4	..	12754b
24	1160	53.6	+19 46	8.7	8.7	B9	3	..	37446i	74	1458	53.9	-5 33	9.0	9.1	A5	4	..	20546b
25	1161	53.6	+19 1	8.9	8.9	Ao	2	..	37568i	75	1364	53.9	-6 27	9.8	9.8	Ao	3	..	20546b
26	1046	53.6	+18 52	7.47	7.47	Ao	5	0,7	37446i	76	1345	53.9	-11 3	8.6	8.6	Ao	5	..	20581b
27	1065	53.6	+13 43	8.2	8.2	B9	4	..	37568i	77	1254	53.9	-17 59	8.7	9.7	Ko	2	..	12632b
28	971	53.6	+12 54	8.9	8.9	Ao	2	..	37568i	78	1253	53.9	-18 47	9.1	9.9	G5	1	..	12632b
29	1427	53.6	-2 6	8.6	8.6	Ao	6	..	12754b	79	2605	53.9	-26 52	8.2	10.3	K5	1	..	42904b
30	1331	53.6	-10 53	8.6	9.6	Ko	4	..	20581b	80	2642	53.9	-29 12	8.8	9.8	Ko	1	..	42904b
31	1342	53.6	-11 25	9.6	10.4	G5	3	..	20581b	81	2554	53.9	-35 1	9.80	10.8	F2	1	..	44364b
32	1325	53.6	-12 11	8.6	8.9	Fo	5	..	20581b	82	2146	53.9	-41 16	10.7	10.7	K5	1	..	20649b
33	3572	53.6	-24 12	9.3	8.9	A3	5	..	17395b	83	2343	53.9	-44 2	6.72	7.1	F5	10	..	20649b
34	540	53.6	-59 38	7.2	8.6	Ko	7	..	15147b	84	542	53.9	-59 56	8.04	9.7	Ko	3	..	15147b
35	449	53.6	-68 28	10.0	10.0	Ao	2	..	18485b	85	540	53.9	-69 7	9.7	10.3	Go	3	..	15167b
36	422	53.6	-72 42	10.2	10.5	F2	3	..	15167b	86	1333	54.0	+48 58	6.24	7.24	Ko	6	0,5	37428i
37	358	53.6	-76 7	9.7	10.5	G5	3	..	15162b	87	1411	54.0	+43 17	7.8	9.0	K5	1	..	38935i
38	1044	53.7	+55 19	8.0	9.2	K5	3	..	37407i	88	1329	54.0	+41 56	7.9	8.3	F5	4	..	37429i
39	1209	53.7	+33 8	6.80	6.86	A2	6	..	37377i	89	1385	54.0	+37 44	8.4	8.5	A2	2	..	37429i
40	965	53.7	+28 45	8.8	9.2	F5	1	..	37440i	90	1037	54.0	+9 15	8.9	8.9	Ao	4	..	38223i
41	966	53.7	+28 8	7.04	8.22	K5	3	..	37377i	91	1133	54.0	+8 24	6.89	7.89	Ko	4	..	38223i
42	1131	53.7	+22 39	9.0	9.0	Ao	2	..	37446i	92	1090	54.0	+4 28	8.1	8.9	G5	3	..	38171i
43	1072	53.7	+21 36	6.68	6.68	Ao	6	..	37446i	93	3291	54.0	-23 49	9.4	10.1	Ko	1	..	17395b
44	1131	53.7	+8 56	8.9	10.1	K5	1	..	38412b	94	2612	54.0	-35 18	4.36	4.19	B3	..	R	28,198
45	1089	53.7	+4 51	8.80	9.58	G5	2	..	38171i	95	2284	54.0	-39 36	9.4	10.1	Ko	2	..	20649b
46	1239	53.7	+0 32	5.25	5.25	Ao	..	0,10	56,81	96	2147	54.0	-41 47	7.6	7.7	F2	8	..	20649b
47	1281	53.7	-9 19	9.8	9.8	B9	3	..	20546b	97	336	54.1	+71 2	8.7	9.3	Go	2	..	38169i
48	1230	53.7	-15 26	9.1	9.1	A	3	R	12632b	98	1350	54.1	+38 5	8.6	9.0	F5	2	..	37429i
49	1316	53.7	-19 57	10.0	9.8	A3	2	..	17395b	99	1431	54.1	-2 50	9.6	9.9	F	2	..	12754b
50	1240	53.7	-20 45	10.0	9.8	G5	2	..	17395b	100	1346	54.1	-11 15	9.1	9.2	A2	6	..	20581b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39500

5^h 47^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3499	47.9	-24 20	10.1	9.8	Ko	2	..	45993b	51	1128	48.3	+51 46	6.48	6.56	A3	7	1,8	37366i
2	3501	47.9	-24 28	10.1	9.8	A3	2	..	45993b	52	1127	48.3	+51 32	8.6	8.7	A2	3	..	37366i
3	2668	47.9	-30 30	8.8	9.2	G5	4	..	44364b	53	1379	48.3	+43 34	8.2	8.2	Ao	3	..	37391i
4	2110	47.9	-40 44	11.4	10.1	F5	2	..	20649b	54	1159	48.3	+20 51	9.5	9.6	A3	2	..	38084i
5	531	47.9	-61 10	9.9	10.9	Ko	2	..	15147b	55	975	48.3	+15 5	8.64	9.14	F8	2	..	37568i
6	333	47.9	-73 38	9.7	10.8	K2	1	..	15167b	56	1040	48.3	+ 5 7	8.96	9.46	F8	2	..	38412b
7	1030	48.0	+21 49	8.8	8.8	Ao	3	..	38084i	57	1203	48.3	+ 0 46	8.9	8.9	B8	3	..	12754b
8	904	48.0	+16 7	8.2	8.1	B5	4	..	37568i	58	1223	48.3	- 3 34	8.6	8.9	Fo	6	..	12754b
9	1018	48.0	+13 52	8.3	8.4	A2	3	..	37568i	59	1288	48.3	-16 41	9.1	9.7	Go	3	..	12632b
10	1039	48.0	+ 7 6	9.3	9.3	Ao	4	..	38412b	60	1217	48.3	-20 49	9.0	9.5	Fo	4	..	17395b
11	1398	48.0	- 2 43	9.1	9.2	A2	3	..	12754b	61	1290	48.3	-21 41	9.1	9.7	Ko	3	..	17395b
12	1241	48.0	- 8 21	9.1	10.1	Ko	3	..	20546b	62	3188	48.3	-23 18	9.6	9.7	G5	1	..	17395b
13	1296	48.0	-12 47	8.24	8.74	F8	2	..	20485b	63	2185	48.3	-42 0	9.0	9.9	G5	4	..	20649b
14	1267	48.0	-14 35	8.0	8.8	G5	3	..	20485b	64	2090	48.3	-43 34	9.5	9.0	Ao	4	..	20649b
15	1199	48.0	-15 34	8.4	8.5	A2	4	..	20485b	65	886	48.3	-55 7	7.44	7.9	Fo	6	..	24143b
16	1198	48.0	-15 52	9.1	9.7	Go	2	..	12632b	66	887	48.3	-55 39	8.7	8.6	Go	4	..	18484b
17	1272	48.0	-17 39	9.1	9.4	Fo	3	..	12632b	67	504	48.3	-65 12	7.61	9.3	Ko	6	2,4-	15147b
18	1287	48.0	-21 53	8.4	8.8	F5	6	..	17395b	68	1013	48.4	+52 56	9.2	9.3	A3	2	..	37366i
19	2229	48.0	-39 21	8.5	9.3	Ko	2	..	46181b	69	907	48.4	+16 19	8.2	8.3	A3	3	R	37568i
20	2228	48.0	-39 35	8.7	9.5	Ko	2	..	46181b	70	937	48.4	+12 25	7.56	8.06	F8	4	..	37568i
21	2286	48.0	-44 14	9.7	9.7	G5	3	..	20649b	71	1059	48.4	+ 6 51	8.9	9.4	F8	2	..	38412b
22	2194	48.0	-45 47	9.2	10.5	Ko	1	..	12756b	72	1155	48.4	+ 1 43	8.7	8.7	B9	6	..	12754b
23	946	48.0	-56 12	4.38	6.6	Ko	..	R	28,198	73	1055	48.4	- 1 17	9.3	10.5	K5	1	..	12754b
24	456	48.0	-66 42	9.6	9.7	A5	2	..	18485b	74	1200	48.4	- 7 52	10.5	10.6	A2	1	..	20546b
25	340	48.0	-75 50	10.0	10.6	G	1	E	20652b	75	2532	48.4	-26 20	7.9	8.4	Ao	4	..	12664b
26	1292	48.1	+36 14	7.38	8.38	Ko	3	..	38124i	76	2525	48.4	-28 42	9.1	9.5	Go	2	..	42904b
27	1273	48.1	+35 3	7.97	8.97	Ko	2	..	38124i	77	888	48.4	-55 5	7.39	8.0	K2	5	..	24143b
28	1040	48.1	+ 7 38	8.5	9.3	G5	2	..	38223i	78	949	48.4	-56 50	8.6	9.2	F2	3	..	18484b
29	1056	48.1	+ 6 14	7.28	7.84	Go	3	..	14071i	79	522	48.4	-59 52	8.78	9.4	Go	3	..	18484b
30	1201	48.1	-15 10	9.1	9.4	F2	3	..	12632b	80	457	48.4	-66 40	8.4	9.4	Ko	4	..	18485b
31	1200	48.1	-15 29	8.7	8.8	A2	5	..	12632b	81	377	48.4	-71 38	9.4	9.8	F5	5	5,2	15167b
32	3504	48.1	-24 25	10.8	10.4	Ao	1	..	45993b	82	875	48.5	+58 10	8.4	9.2	G5	2	..	37407i
33	2734	48.1	-25 59	6.87	8.3	G5	7	..	12664b	83	922	48.5	+57 18	8.4	9.4	Ko	2	..	37408i
34	2529	48.1	-26 32	9.8	10.1	Ko	2	..	45993b	84	1080	48.5	+56 57	8.5	8.5	Ao	4	..	37407i
35	2112	48.1	-40 45	10.7	9.8	F8	3	..	20649b	85	967	48.5	+53 20	8.6	9.7	K2	2	..	37366i
36	353	48.1	-74 13	9.9	10.9	K	1	..	15167b	86	1139	48.5	+31 41	5.81	5.89	A3	8	..	37377i
37	959	48.2	+54 15	8.4	9.0	Go	4	5,4	37407i	87	1162	48.5	+20 16	4.62	5.12	F8	..	0,R	3273c
38	1126	48.2	+51 51	8.9	9.4	F8	2	..	37366i	88	1010	48.5	+18 54	7.7	7.7	Ao	4	..	37568i
39	1042	48.2	+ 7 42	8.7	8.8	A2	2	..	38223i	89	942	48.5	+12 32	8.1	8.2	A5	3	..	37568i
40	1198	48.2	- 7 24	10.3	10.3	B9	3	..	20546b	90	922	48.5	+10 15	8.22	9.22	Ko	1	..	38223i
41	1199	48.2	- 7 53	10.4	10.9	F8	1	..	20546b	91	1061	48.5	+ 6 31	8.3	8.3	B9	4	..	38412b
42	1289	48.2	-21 33	9.1	10.0	Go	1	..	17395b	92	1342	48.5	- 6 8	10.0	10.0	Ao	2	..	20546b
43	2556	48.2	-29 29	6.49	8.1	Ko	6	..	12664b	93	1204	48.5	- 7 19	9.8	10.3	F8	3	..	20546b
44	2790	48.2	-31 32	8.8	9.8	Go	2	..	44364b	94	1315	48.5	-11 38	8.7	9.2	F8	2	..	18414b
45	2440	48.2	-37 46	10.0	10.8	Ko	1	5,1	46181b	95	1302	48.5	-12 19	9.1	9.1	Ao	2	..	18414b
46	2114	48.2	-40 32	9.4	9.3	F8	3	..	20649b	96	1299	48.5	-12 39	8.2	8.3	A5	2	..	18414b
47	791	48.2	-52 48	6.34	7.1	F5	8	R	24143b	97	3194	48.5	-23 26	10.3	9.7	Go	1	..	17395b
48	791	48.2	-52 48			A				98	2563	48.5	-29 21	9.8	9.8	Ao	1	..	44364b
49	873	48.3	+58 31	8.9	9.7	G5	2	..	37408i	99	2609	48.5	-32 14	8.7	9.8	K5	1	..	14690b
50	966	48.3	+53 33	8.2	8.3	A2	6	1,5	37407i	100	2556	48.5	-35 56	8.0	7.6	Ao	6	2,7	9061b

THE HENRY DRAPER CATALOGUE.

39600

5^h 48^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2117	48.5	-40 10	7.9	8.9	G5	7	..	20649b	51	3513	48.8	-24 28	9.0	9.3	Ko	2	..	12664b
2	2104	48.5	-41 43	8.0	8.6	Go	5	..	20649b	52	2564	48.8	-27 20	9.3	9.6	Ao	3	3,2	45993b
3	2187	48.5	-42 55	9.7	10.3	Ko	2	..	20649b	53	2449	48.8	-37 11	9.0	9.9	Go	4	0,2	46181b
4	2292	48.5	-44 34	8.5	8.8	Ko	6	..	20649b	54	2109	48.8	-41 8	7.0	8.3	K5	7	..	20649b
5	2046	48.5	-46 23	9.0	9.7	Ko	2	..	12756b	55	2295	48.8	-44 3	8.6	8.5	Fo	5	..	20649b
6	1957	48.5	-50 44	8.6	9.2	K2	2	..	12756b	56	486	48.8	-63 3	9.2	10.4	K5	2	..	15147b
7	950	48.5	-53 27	8.1	8.3	A5	6	..	24143b	57	354	48.8	-74 5	9.2	9.8	Go	6	..	15167b
8	487	48.5	-60 43	7.2	9.5	K2	6	..	15147b	58	963	48.9	+54 44	8.9	8.9	Ao	3	..	37366i
9	484	48.5	-63 24	9.4	10.4	Ko	2	..	15147b	59	1067	48.9	+46 6	10.2	..	Pd	1	..	37428i
10	355	48.6	+69 24	8.2	9.2	Ko	2	E	38112i	60	1304	48.9	+41 19	6.54	6.82	Fo	7	5,5	37429i
11	940	48.6	+28 23	8.6	8.6	B9	2	..	37377i	61	976	48.9	+15 30	8.2	8.2	B9	7	..	37568i
12	926	48.6	+10 13	6.98	7.76	G5	5	..	38223i	62	964	48.9	+11 45	6.46	6.44	B9	8	..	37568i
13	1048	48.6	+7 42	8.8	9.8	Ko	2	..	38412b	63	1104	48.9	+8 23	8.9	9.0	A2	3	..	38412b
14	1343	48.6	-6 26	9.1	9.1	B9	3	..	20546b	64	1345	48.9	-6 35	8.6	8.7	A2	3	..	20546b
15	1243	48.6	-8 8	8.6	9.7	K2	3	..	20546b	65	1246	48.9	-8 2	10.3	10.6	Fo	2	..	20546b
16	1242	48.6	-8 20	9.8	10.2	F5	3	..	20546b	66	1290	48.9	-16 1	9.6	9.7	A2	3	..	12632b
17	1289	48.6	-16 44	9.1	9.1	Ao	5	..	12632b	67	1291	48.9	-16 19	9.1	9.5	F5	4	..	12632b
18	1219	48.6	-20 44	9.6	9.8	F8	3	..	17395b	68	2679	48.9	-30 48	9.4	9.8	F5	2	..	44364b
19	3196	48.6	-23 39	9.4	9.4	G5	2	..	17395b	69	2561	48.9	-35 24	8.4	8.8	Ao	4	2,3	12665b
20	2567	48.6	-29 9	8.8	9.5	Go	2	5,2	42904b	70	2452	48.9	-37 38	10.7	10.8	Go	1	..	42917b
21	2501	48.6	-36 19	8.0	9.6	Ko	3	..	46181b	71	2192	48.9	-42 31	11.0	10.7	A	1	..	20649b
22	2118	48.6	-40 44	9.4	9.2	Fo	4	..	20649b	72	2094	48.9	-43 14	11.0	11.0	Go	1	..	20649b
23	2108	48.6	-41 53	9.4	10.4	Ma	2	..	20649b	73	1917	48.9	-49 22	8.5	9.4	K2	3	..	12756b
24	2189	48.6	-42 32	9.9	9.8	Ko	3	..	20649b	74	524	48.9	-69 47	9.2	10.6	Ma	..	..	M
25	1959	48.6	-50 40	8.7	8.8	Go	2	5,2	24143b	75	380	48.9	-71 2	9.1	9.7	Go	7	2,2	15167b
26	378	48.6	-71 34	10.2	10.8	G	2	R	15167b	76	1130	49.0	+51 45	8.6	9.4	G5	3	..	37366i
27	335	48.6	-73 26	10.3	10.6	F2	3	..	15167b	77	1037	49.0	+29 57	7.16	7.44	Fo	2	..	37377i
28	1028	48.7	+55 57	6.97	7.75	G5	4	5,3	37407i	78	1037	49.0	+21 23	7.8	7.8	B9	4	..	38084i
29	1440	48.7	+42 30	8.2	9.0	G5	2	..	37429i	79	1013	49.0	+18 15	8.9	8.9	Ao	3	..	37568i
30	1295	48.7	+36 47	9.0	9.0	Ao	2	..	38124i	80	1026	49.0	+13 49	7.9	7.7	B	2	R	38223i
31	1012	48.7	+18 29	8.1	8.9	G5	2	..	37568i	81	965	49.0	+11 29	7.6	7.6	B9	5	..	37568i
32	927	48.7	+10 34	6.50	7.50	Ko	5	..	38223i	82	1105	49.0	+8 17	8.7	9.7	Ko	3	..	38412b
33	1433	48.7	-5 18	8.4	9.4	Ko	4	..	20546b	83	1107	49.0	+8 2	7.7	7.7	B9	6	..	14071i
34	1344	48.7	-6 17	8.0	9.4	Ma	3	..	20546b	84	1042	49.0	+5 58	8.3	9.3	Ko	2	..	38412b
35	1309	48.7	-10 42	8.6	8.6	Ao	6	0,3	20546b	85	1071	49.0	+3 13	6.55	7.55	Ko	5	..	14071i
36	2532	48.7	-28 13	9.4	9.8	G5	1	..	42904b	86	1208	49.0	-7 3	9.1	9.7	Go	3	..	20546b
37	2590	48.7	-33 51	10.0	9.5	Go	2	..	44364b	87	1247	49.0	-8 1	10.5	10.9	F5	2	..	20546b
38	2190	48.7	-42 3	9.7	9.8	Go	3	..	20649b	88	1292	49.0	-16 17	7.9	8.5	Go	7	..	20485b
39	1960	48.7	-50 17	8.5	9.1	Ko	2	2,2	12756b	89	1278	49.0	-17 17	8.7	9.7	Ko	3	..	12632b
40	794	48.7	-52 8	4.98	6.6	Ko	..	5,8	28,198	90	1294	49.0	-21 50	9.1	9.7	K2	3	..	17395b
41	488	48.7	-60 50	9.2	10.0	Fo	4	..	15147b	91	1254	49.0	-22 29	9.1	9.7	F5	2	..	17395b
42	417	48.8	+68 8	8.9	9.7	G5	2	E	38112i	92	2574	49.0	-29 3	9.6	9.8	F	2	..	42904b
43	1214	48.8	+47 42	7.59	7.57	B9	5	..	37366i	93	2453	49.0	-37 44	8.7	9.9	A3	4	..	12665b
44	906	48.8	+27 19	8.0	8.4	F5	3	..	37377i	94	2098	49.0	-43 35	10.6	11.5	Ko	1	..	20649b
45	1096	48.8	+22 30	7.6	8.6	Ko	4	..	38084i	95	952	49.0	-56 56	8.8	9.5	A3	3	..	18484b
46	1435	48.8	-5 30	9.6	10.0	F5	2	..	20546b	96	1030	49.1	+55 59	9.5	10.1	Go	2	..	37407i
47	1434	48.8	-5 43	6.80	6.78	B9	6	1,10	37625i	97	1297	49.1	+36 55	7.16	7.30	A5	4	..	37429i
48	1259	48.8	-9 32	9.1	9.9	G5	2	..	20546b	98	1126	49.1	+19 44	5.89	5.70	B2	..	1,10	286c
49	1277	48.8	-17 48	8.4	9.2	G5	5	..	12632b	99	1051	49.1	+17 23	7.4	8.6	K5	4	..	37568i
50	1219	48.8	-18 4	9.1	9.6	F8	2	..	12632b	100	1027	49.1	+13 49	8.5	8.5	Ao	3	..	37568i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39700

5^h 49^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1073	49.1	+ 4 5	8.5	9.1	Go	2	..	38412b	51	2460	49.4	-37 41	9.4	10.5	K2	1	..	46181b
2	1276	49.1	- 4 58	8.65	9.07	F5	5	..	20546b	52	2270	49.4	-38 33	6.74	7.9	Ko	6	5,7	12665b
3	1208	49.1	-15 29	9.0	9.0	Ao	4	..	12632b	53	2016	49.4	-48 45	9.7	9.1	A3	3	..	12756b
4	1294	49.1	-16 1	8.7	9.7	Ko	3	..	12632b	54	954	49.4	-53 41	8.2	8.7	Fo	6	..	24143b
5	1221	49.1	-20 10	8.4	9.4	K5	3	..	17395b	55	529	49.4	-62 6	8.3	8.6	F2	8	..	15147b
6	2614	49.1	-32 22	7.8	8.6	G5	5	E	14690b	56	451	49.4	-70 23	8.2	8.6	F5	5	3,8	24561b
7	341	49.1	-75 48	9.8	10.8	Ko	1	E	20652b	57	..	49.5	+51 41	..	..	Ao	2	..	37366i
8	112	49.1	-83 18	8.8	9.9	K2	2	..	20557b	58	..	49.5	+ 7 1	..	8.2	A5	3	..	..
9	117	49.2	+84 7	9.2	9.6	F5	3	..	38330i	59	1054	49.5	+ 7 1	8.1	9.1	K	1	R	38412b
10	618	49.2	+63 48	9.2	9.3	A3	3	..	38154i	60	1228	49.5	- 3 4	9.1	9.1	Ao	1	..	12754b
11	1453	49.2	+39 42	8.6	8.6	Ao	2	..	37429i	61	1272	49.5	-14 8	7.44	8.44	Ko	4	..	20485b
12	1055	49.2	+30 41	8.4	8.4	B8	3	..	37377i	62	1226	49.5	-18 10	9.1	9.9	G5	2	..	12632b
13	1039	49.2	+29 9	7.85	8.63	G5	3	..	37377i	63	2620	49.5	-32 50	8.0	8.0	A2	6	..	9061b
14	1110	49.2	+ 8 13	8.3	8.9	Go	4	..	38412b	64	2599	49.5	-33 50	4.89	4.77	B5	..	R	28,198
15	1085	49.2	+ 2 9	9.1	10.2	K2	1	..	39866b	65	2508	49.5	-36 22	10.4	11.3	G5	3	..	42917b
16	1347	49.2	- 6 46	8.6	8.5	B5	6	..	20546b	66	2201	49.5	-45 27	9.5	9.6	G5	2	..	12756b
17	1256	49.2	-22 23	8.2	8.6	B9	7	..	17395b	67	452	49.5	-71 0	9.8	10.3	F8	4	..	15167b
18	2503	49.2	-34 35	6.61	7.4	Go	8	..	12665b	68	353	49.5	-76 48	10.4	11.2	G5	1	..	20652b
19	2506	49.2	-36 44	8.7	10.5	Ma	1	..	46181b	69	1331	49.6	+38 27	8.1	8.1	B9	2	..	37429i
20	2457	49.2	-37 40	5.64	6.8	Ko	..	0,9	28,198	70	1108	49.6	+23 16	8.8	8.9	A2	2	..	38084i
21	342	49.2	-75 19	10.4	10.5	A5	2	E	20652b	71	946	49.6	+12 53	7.9	8.5	Go	3	..	37568i
22	216	49.2	-77 23	9.7	10.8	K2	2	..	20652b	72	1065	49.6	+ 6 13	8.9	9.3	F5	2	..	38412b
23	921	49.3	+59 23	7.7	8.7	Ko	3	..	37407i	73	1044	49.6	+ 5 51	6.73	6.71	B9	6	..	14071i
24	1032	49.3	+55 39	7.09	7.09	Ao	6	0,5 R	37407i	74	1046	49.6	+ 5 20	7.7	8.5	G5	3	..	14071i
25	1283	49.3	+35 9	8.17	9.17	Ko	1	..	38124i	75	1208	49.6	+ 0 57	6.23	7.23	Ko	5	E	14071i
26	1039	49.3	+21 4	8.4	8.4	Ao	4	..	37446i	76	1229	49.6	- 3 13	8.6	9.0	F5	5	..	12754b
27	1168	49.3	+20 27	8.7	9.0	F2	2	..	38084i	77	1281	49.6	- 4 5	6.35	6.18	B3	7	..	37625i
28	1131	49.3	+19 40	8.10	8.10	Ao	3	..	37568i	78	2104	49.6	-43 8	9.9	10.5	G5	2	..	20649b
29	1074	49.3	+14 12	6.84	7.84	Ko	..	5,6	56,81	79	343	49.6	-75 22	9.8	10.8	Ko	1	E	20652b
30	1005	49.3	+ 9 15	8.8	8.9	A2	2	..	38223i	80	75	49.6	-84 50	6.24	6.0	Ao	9	..	11010b
31	1043	49.3	+ 5 20	7.9	8.7	G5	4	..	38412b	81	915	49.7	+60 22	7.01	7.29	Fo	..	0,5-	56,81
32	1059	49.3	- 1 5	7.9	9.3	Ma	3	..	12754b	82	923	49.7	+57 53	8.9	9.0	A5	2	..	37407i
33	1304	49.3	-12 25	8.01	9.01	Ko	3	..	12770b	83	1202	49.7	+45 29	var.	var.	Mc	..	R	M
34	3520	49.3	-24 40	9.6	9.2	Ao	3	..	12664b	84	1301	49.7	+36 52	7.84	7.90	A2	4	..	38124i
35	2685	49.3	-30 36	7.94	9.5	K5	3	..	14690b	85	1171	49.7	+20 27	8.2	9.4	K5	1	..	38084i
36	2565	49.3	-35 39	8.7	9.0	Fo	4	5,3	12665b	86	1230	49.7	- 3 30	8.4	8.8	F5	6	..	12754b
37	2126	49.3	-40 15	10.9	9.8	F5	2	..	20649b	87	1250	49.7	- 8 26	6.71	7.71	Ko	8	..	20546b
38	953	49.3	-53 37	9.7	9.8	A3	2	..	24143b	88	1281	49.7	-17 7	9.0	9.4	F5	5	..	12632b
39	440	49.3	-68 26	10.0	10.0	A	1	R	18485b	89	1293	49.7	-19 40	6.46	7.3	Ao	10	..	17395b
40	243	49.4	+75 44	9.37	9.51	A5	1	..	37343i	90	1225	49.7	-20 54	9.1	10.0	K2	2	..	17395b
41	266a	49.4	+74 30	var.	var.	Md	..	R	M	91	3213	49.7	-23 11	10.1	9.5	G5	2	..	17395b
42	1250	49.4	+50 21	8.9	9.4	F8	3	..	37366i	92	2540	49.7	-28 22	9.4	9.2	F5	4	..	42904b
43	1423	49.4	+49 1	6.44	7.22	G5	6	5,4	37428i	93	2512	49.7	-36 58	8.0	8.4	Ao	3	2,3	12665b
44	1070	49.4	+46 37	8.9	9.2	Fo	1	..	37428i	94	2461	49.7	-37 28	10.7	10.2	Ao	3	0,2	46181b
45	1284	49.4	+35 13	7.82	8.82	Ko	3	..	38124i	95	2131	49.7	-40 50	8.7	9.5	K5	3	..	20649b
46	914	49.4	+27 42	7.7	7.5	B2	..	2,5	56,81	96	2195	49.7	-42 48	8.1	8.6	G5	5	..	20649b
47	1280	49.4	- 4 45	9.1	9.4	Fo	2	..	20546b	97	1966	49.7	-50 54	9.5	9.1	Go	2	..	24143b
48	1436	49.4	- 5 34	8.6	9.6	Ko	3	..	20546b	98	221	49.8	+77 34	8.6	9.2	Go	4	..	37558i
49	1348	49.4	- 6 25	9.0	9.5	F8	4	..	20546b	99	1033	49.8	+55 54	8.2	8.7	F8	3	..	37407i
50	2582	49.4	-29 47	10.1	9.8	A2	2	..	44364b	100	932	49.8	+10 27	8.2	8.3	A2	2	..	38223i

THE HENRY DRAPER CATALOGUE.

39800

5^h 49^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1055	49.8	+ 7 23	0.92	2.27	Ma	..	0,R	28,198	51	1212	50.1	- 7 27	9.6	10.2	Go	1	..	20546b
2	1211	49.8	+ 0 34	8.8	9.8	Ko	3	..	12754b	52	1262	50.1	- 9 12	8.0	8.0	Ao	5	0,10	37625i
3	1114	49.8	- 0 14	9.1	9.1	A	3	..	12754b	53	1321	50.1	-11 48	5.81	6.88	K2	7	..	20485b
4	2515	49.8	-36 17	8.5	9.4	Go	4	0,3	46181b	54	1284	50.1	-17 47	8.2	9.2	Ko	4	..	12632b
5	2273	49.8	-38 57	9.0	9.8	Go	1	..	46181b	55	1297	50.1	-19 43	7.34	7.8	G5	7	..	17395b
6	2241	49.8	-39 32	8.4	9.5	K2	2	..	46181b	56	2764	50.1	-25 4	8.85	9.2	G5	2	..	12664b
7	1925	49.8	-49 37	9.7	9.4	Fo	3	..	15220b	57	2766	50.1	-25 56	9.6	9.6	Ao	2	..	12664b
8	1968	49.8	-50 24	9.7	9.1	F5	2	0,2	24143b	58	2111	50.1	-43 18	11.0	11.2	G5	1	..	20649b
9	534	49.8	-61 27	9.0	9.5	F5	4	..	15147b	59	419	50.1	-72 1	10.1	11.3	K5	1	..	15167b
10	418	49.8	-72 44	6.51	7.9	Ko	9	R	20540b	60	196	50.1	-79 34	9.3	9.7	F5	4	..	20557b
11	338	49.8	-73 30	10.2	10.6	F5	5	R	15167b	61	201	50.2	+81 31	8.9	9.5	Go	2	..	38330i
12	337	49.8	-73 31	10.2	10.6	F5	5	R	15167b	62	1133	50.2	+51 7	8.9	9.4	F8	2	..	37366i
13	839	49.9	+61 7	8.7	9.3	Go	3	..	38154i	63	1205	50.2	+45 53	6.56	7.34	G5	5	..	37391i
14	1333	49.9	+38 34	7.8	7.8	Ao	3	..	37429i	64	1288	50.2	+35 34	7.50	8.85	Mb	3	..	37377i
15	1193	49.9	+33 12	8.0	8.5	F8	3	..	37377i	65	1045	50.2	+29 44	8.6	8.6	B8	3	..	37377i
16	..	49.9	+20 10	var.	var.	Md	..	R	286c	66	952	50.2	+28 56	6.42	6.48	A2	6	R	37377i
17	1212	49.9	-15 44	7.6	7.6	B9	9	..	20485b	67	1136	50.2	+19 21	8.1	8.1	B9	6	..	37568i
18	3526	49.9	-24 20	10.1	10.4	Ko	1	..	45993b	68	1213	50.2	+ 0 51	9.3	9.3	B9	3	..	12754b
19	2588	49.9	-29 2	9.8	10.1	Ko	2	..	42904b	69	1405	50.2	- 2 24	9.4	9.4	Ao	2	..	12754b
20	2811	49.9	-31 43	8.4	9.9	K5	1	..	44364b	70	1213	50.2	- 7 1	9.6	10.0	F5	2	..	20546b
21	2464	49.9	-37 46	9.6	10.5	Ko	2	5,1	46181b	71	2768	50.2	-25 33	7.9	9.2	A3	3	..	12664b
22	2070	49.9	-47 54	9.3	8.1	Ao	4	..	12756b	72	2590	50.2	-29 47	9.1	10.1	K5	1	..	44364b
23	1926	49.9	-49 7	7.9	8.6	G5	4	..	12756b	73	2698	50.2	-30 2	8.6	8.9	F5	5	..	44364b
24	1426	50.0	+49 59	9.4	9.8	F5	1	..	37366i	74	2119	50.2	-41 59	8.0	8.3	Ao	7	..	20649b
25	1324	50.0	+48 24	8.7	8.8	A2	2	..	37366i	75	799	50.2	-52 5	7.1	8.2	Ma	4	..	24143b
26	1304	50.0	+36 8	8.6	8.7	A3	1	..	38124i	76	581	50.2	-58 45	9.4	10.0	G	2	..	18484b
27	1079	50.0	+14 10	8.1	8.9	G5	2	..	37568i	77	357	50.2	-74 48	9.9	10.0	A2	4	..	15162b
28	950	50.0	+12 59	7.7	8.5	G5	4	..	37568i	78	1018	50.3	+52 2	9.2	9.5	Fo	2	..	37366i
29	970	50.0	+11 48	8.3	9.1	G5	2	..	38223i	79	1057	50.3	+17 59	8.3	9.3	Ko	1	..	37568i
30	1113	50.0	+ 8 40	9.3	9.3	Ao	2	..	38223i	80	1035	50.3	+13 59	8.5	9.3	G5	2	..	37568i
31	1067	50.0	+ 6 43	8.8	8.9	A2	2	..	14071i	81	1036	50.3	+13 56	6.48	7.26	G5	..	5,7	56,81
32	1074	50.0	+ 4 41	8.5	9.5	Ko	2	5,2	39866b	82	951	50.3	+12 57	8.3	8.2	B5	5	..	37568i
33	1115	50.0	- 0 30	7.8	8.4	Go	7	..	12754b	83	1115	50.3	+ 8 58	8.5	9.1	Go	3	..	38412b
34	1116	50.0	- 0 57	8.3	9.1	G5	6	..	12754b	84	1075	50.3	+ 4 44	8.2	8.2	Ao	3	..	39866b
35	1210	50.0	- 7 24	9.1	9.5	F5	3	..	20546b	85	1286	50.3	- 4 4	8.5	9.5	Ko	4	..	20546b
36	1211	50.0	- 7 32	9.1	9.1	Ao	4	..	20546b	86	1214	50.3	- 7 9	10.3	10.9	G	2	..	20546b
37	1320	50.0	-11 50	8.6	8.7	A2	4	3,6	18414b	87	1215	50.3	- 7 10	10.3	10.9	G	1	R	20546b
38	2697	50.0	-30 42	9.0	9.0	A2	5	..	44364b	88	1264	50.3	- 9 49	7.46	7.80	F2	9	..	20546b
39	2574	50.0	-35 50	9.4	10.5	Ko	1	..	46181b	89	1323	50.3	-11 20	9.1	9.2	A2	2	..	20581b
40	2520	50.0	-36 52	10.7	9.9	F5	2	3,2	46181b	90	2592	50.3	-29 8	9.1	9.2	F5	3	..	42904b
41	2206	50.0	-45 20	8.0	8.1	A2	7	..	12756b	91	2595	50.3	-29 10	6.17	7.3	F2	10	..	42904b
42	491	50.0	-63 37	8.7	9.1	F5	4	..	15147b	92	2113	50.3	-43 10	10.6	11.3	Ko	1	..	20649b
43	461	50.0	-66 30	9.6	9.7	A2	2	..	18485b	93	2026	50.3	-48 24	9.0	9.5	A2	5	..	12756b
44	463	50.0	-66 56	5.15	5.03	B5	..	0,7 R	28,198	94	419	50.4	+67 0	6.87	6.87	Ao	8	3,7	37545i
45	1335	50.1	+38 16	7.24	8.42	K5	2	..	37429i	95	1308	50.4	+36 23	8.4	8.4	Ao	3	..	38124i
46	1287	50.1	+35 43	8.7	9.3	Go	2	..	38124i	96	1178	50.4	+20 35	8.8	8.8	Ao	1	..	38084i
47	1034	50.1	+25 19	7.71	7.77	A2	4	0,3 R	38084i	97	1022	50.4	+18 4	8.2	9.2	Ko	2	..	37568i
48	1117	50.1	- 0 15	9.6	9.6	A	2	..	12754b	98	1061	50.4	+17 47	8.8	8.9	A2	3	..	37568i
49	1060	50.1	- 1 57	7.32	7.38	A2	7	0,4	12754b	99	1310	50.4	-12 57	7.78	8.28	F8	3	..	20485b
50	1403	50.1	- 2 55	9.8	9.8	Ao	2	..	12754b	100	1228	50.4	-18 52	8.6	8.9	Fo	4	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39900

5^h 50^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2205	50.4	-42 57	6.34	7.7	Ko	8	..	20649b	51	1062	50.8	+ 7 29	8.8	9.1	Fo	4	..	38412b
2	507	50.4	-65 17	7.96	8.2	Ao	7	0,3	18485b	52	1087	50.8	+ 2 26	9.1	9.2	A3	2	1,2	39866b
3	516	50.4	-67 5	9.0	9.0	Ao	6	..	18485b	53	1218	50.8	+ 0 49	7.6	7.6	Ao	8	..	39866b
4	529	50.4	-69 49	9.5	9.8	F2	5	0,2	15167b	54	1122	50.8	- 0 53	8.4	9.2	G5	5	..	12754b
5	1073	50.5	+46 41	7.8	8.2	F5	2	..	37366i	55	1411	50.8	- 2 14	10.3	10.3	A	2	..	12754b
6	1062	50.5	+31 1	9.5	9.5	A	1	R	37377i	56	1292	50.8	- 4 6	9.1	9.2	A2	5	..	20546b
7	971	50.5	+11 31	7.9	7.9	B9	5	..	37568i	57	1221	50.8	- 7 28	8.4	8.4	Ao	6	..	20546b
8	1064	50.5	- 1 5	9.1	9.2	A2	5	..	12754b	58	1220	50.8	- 7 41	7.8	8.8	Ko	5	..	20546b
9	1409	50.5	- 2 30	9.0	10.2	K5	1	..	12754b	59	1253	50.8	- 8 49	9.1	10.1	Ko	3	..	20546b
10	1289	50.5	- 4 38	5.98	6.98	Ko	6	..	37625i	60	2774	50.8	-25 28	8.8	9.5	Go	2	..	12664b
11	1288	50.5	- 4 50	7.10	7.10	Ao	6	..	37625i	61	2144	50.8	-40 1	9.55	9.8	G5	2	..	20649b
12	1439	50.5	- 5 41	9.8	9.8	B9	2	..	20546b	62	2215	50.8	-42 15	8.4	8.0	F2	8	..	20649b
13	1298	50.5	-21 17	8.6	8.9	K5	4	..	17395b	63	486	50.8	-64 4	6.42	7.3	Ko	8	R	38371b
14	2772	50.5	-25 17	8.8	10.3	K5	2	..	17395b	64		50.8	-64 4			A3			
15	2470	50.5	-37 33	7.32	7.6	A2	5	2,4	12665b	65	1019	50.9	+52 30	9.0	9.8	G5	2	..	37366i
16	2122	50.5	-41 49	10.7	10.4	Go	1	..	20649b	66	1220	50.9	+47 24	8.9	8.9	Ao	2	0,1	37366i
17	2114	50.5	-43 35	7.6	8.5	Go	6	..	20649b	67	1450	50.9	+42 50	8.0	8.5	F8	2	..	37429i
18	2077	50.5	-47 59	7.2	7.5	K2	8	..	12756b	68	1466	50.9	+40 48	8.1	8.2	A5	2	..	37429i
19	956	50.5	-56 29	7.4	8.3	Ko	6	..	18484b	69	1197	50.9	+33 7	8.4	8.5	A3	3	..	37377i
20	355	50.5	-76 12	9.5	9.8	Fo	6	..	15162b	70	1033	50.9	+24 14	6.02	5.85	B3	7	1,7 R	38084i
21	884	50.6	+58 53	8.9	8.9	Ao	3	..	37407i	71	1026	50.9	+18 21	8.9	8.9	Ao	3	..	37568i
22	1209	50.6	+45 6	8.17	9.17	Ko	1	..	37428i	72	1325	50.9	-11 15	9.8	9.8	Ao	2	..	20581b
23	1337	50.6	+38 37	7.83	9.01	K5	2	..	37429i	73	2616	50.9	-33 48	9.0	9.5	G5	4	..	44364b
24	1290	50.6	+36 1	8.2	8.3	A3	3	..	38124i	74	2216	50.9	-42 2	9.7	10.3	G5	1	..	20649b
25	1063	50.6	+30 35	7.8	9.0	K5	2	..	37377i	75	2218	50.9	-45 43	9.1	9.6	Ko	3	..	12756b
26	1060	50.6	+ 7 50	8.3	8.3	Ao	5	..	38412b	76	800	50.9	-52 32	9.1	9.4	Ko	1	..	24143b
27	1291	50.6	- 4 49	6.22	6.22	Ao	8	..	37625i	77	904	50.9	-57 55	9.6	9.6	A	2	..	18484b
28	1288	50.6	-16 59	9.1	9.7	Go	5	..	12632b	78	903	50.9	-57 56	8.3	8.9	G5	3	..	18484b
29	1259	50.6	-22 51	9.1	9.0	A2	4	..	17395b	79	495	50.9	-63 33	8.1	8.2	A3	9	..	15147b
30	2820	50.6	-31 10	8.0	9.5	Ko	4	..	44364b	80	530	50.9	-69 43	8.8	10.0	K5	3	5,1	15167b
31	2521	50.6	-34 20	8.8	10.4	K5	1	..	46181b	81	114	50.9	-83 20	8.4	9.0	Go	5	..	20557b
32	2580	50.6	-35 56	6.78	7.3	F2	8	3,8	9061b	82	1365	51.0	+37 31	7.56	8.63	K2	2	..	38124i
33	2143	50.6	-40 26	10.0	9.9	F8	2	..	20649b	83	1109	51.0	+22 50	var.	var.	Mb	2	0,2 R	38084i
34	2210	50.6	-42 29	10.3	9.5	F5	3	..	20649b	84	989	51.0	+15 59	8.9	9.0	A2	3	..	37568i
35	2215	50.6	-45 34	9.0	8.7	Ao	5	..	12756b	85	1016	51.0	+ 9 29	6.01	5.99	B9	8	..	38223i
36	958	50.6	-56 14	8.8	8.9	A2	5	..	18484b	86	1078	51.0	+ 4 54	9.40	9.40	Ao	2	..	38412b
37	901	50.6	-57 11	5.95	7.3	F5	..	0,10	56,121	87	1077	51.0	+ 3 51	8.1	8.5	F5	2	..	39866b
38	1292	50.7	+35 46	7.9	8.7	G5	3	..	38124i	88	1161	51.0	+ 1 47	9.3	9.4	A2	4	E	12754b
39	1136	50.7	+32 41	8.0	8.0	B9	4	..	37377i	89	1412	51.0	- 2 48	8.8	8.8	Ao	4	..	12754b
40	1061	50.7	+ 7 44	8.9	9.3	F5	4	..	38412b	90	1222	51.0	- 7 40	8.4	8.4	Ao	7	..	20546b
41	1070	50.7	+ 6 36	9.6	9.6	Ao	2	..	38412b	91	1268	51.0	- 9 25	9.1	9.4	Fo	3	..	20546b
42	1266	50.7	- 9 53	8.76	8.84	A3	5	..	20546b	92	1267	51.0	- 9 56	9.41	9.97	Go	2	..	20546b
43	3230	50.7	-23 58	9.3	9.2	Ko	3	..	17395b	93	1318	51.0	-10 52	9.1	10.1	K	1	E	20581b
44	2773	50.7	-25 36	9.3	10.1	F5	2	..	45993b	94	1302	51.0	-21 27	9.6	8.9	Ao	4	R	17395b
45	2558	50.7	-26 41	6.81	7.7	A3	9	..	12664b	95	2617	51.0	-33 38	8.8	9.2	Go	4	..	44364b
46	2613	50.7	-33 54	8.2	9.2	Ko	4	0,2	44364b	96	2582	51.0	-35 6	8.10	8.7	Fo	4	0,3	12665b
47	1392	50.8	+43 12	8.2	9.2	Ko	2	..	38935i	97	2127	51.0	-41 22	8.1	8.9	F8	6	..	20649b
48	1218	50.8	+34 9	9.4	9.4	Ao	2	E	38124i	98	2219	51.0	-45 57	10.3	10.2	A3	2	..	12756b
49	923	50.8	+27 18	7.7	8.5	G5	4	..	37377i	99	1663	51.0	-51 5	9.2	9.4	K2	2	..	24143b
50	1051	50.8	+21 44	9.1	9.4	F	1	..	38084i	100	305	51.1	+73 5	8.5	8.6	A2	4	..	37343i

THE HENRY DRAPER CATALOGUE.

40000

5^h 51^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1199	51.1	+33 15	7.43	7.93	F8	5	..	37377i	51	2623	51.3	-33 41	8.4	9.0	Ko	2	..	10682b
2	1011	51.1	+26 51	8.0	9.1	K2	2	E	37440i	52	2149	51.3	-40 4	10.9	10.1	A2	2	..	20649b
3	1119	51.1	+23 25	8.6	9.1	F8	2	..	38084i	53	2218	51.3	-42 40	10.3	10.1	Ko	2	..	20649b
4	1031	51.1	+18 22	8.9	8.9	Ao	2	..	37568i	54	2318	51.3	-44 42	9.9	9.6	Go	4	..	20649b
5	926	51.1	+16 21	6.91	6.74	B3	8	..	37568i	55	247	51.4	+75 35	6.52	7.70	K5	6	3,6	37343i
6	991	51.1	+15 4	7.59	8.59	Ko	3	..	37568i	56	1319	51.4	+41 45	8.1	8.1	B9	4	..	37429i
7	936	51.1	+10 33	8.9	9.7	G5	1	..	38412b	57	1056	51.4	+21 59	9.1	9.7	Go	2	..	38084i
8	1221	51.1	+0 9	9.3	10.1	G5	1	..	12754b	58	1441	51.4	-5 54	9.4	10.0	Go	3	..	20546b
9	1413	51.1	-2 12	8.6	8.6	Ao	3	..	12754b	59	1226	51.4	-7 34	10.3	10.9	Go	2	..	20546b
10	1414	51.1	-2 49	9.1	9.4	Fo	4	..	12754b	60	1236	51.4	-18 1	8.8	9.6	G5	3	..	12632b
11	1238	51.1	-3 49	8.6	8.6	B8	7	1,2	20546b	61	619	51.5	+63 37	8.7	9.3	Go	3	..	38154i
12	1256	51.1	-8 45	9.1	9.2	A5	3	..	20546b	62	1036	51.5	+55 19	6.48	6.54	A2	6	1,7 R	37366i
13	1216	51.1	-15 30	9.8	10.3	F8	2	..	12632b	63	976	51.5	+53 33	8.8	9.6	G5	1	..	37366i
14	1293	51.1	-17 12	10.0	10.0	Ao	2	..	12632b	64	1212	51.5	+45 50	7.8	8.6	G5	2	..	37428i
15	1292	51.1	-17 56	9.4	9.4	Ao	2	..	12632b	65	1039	51.5	+24 36	7.31	7.26	B8	5	E	37446i
16	3543	51.1	-24 34	9.8	10.1	Ko	1	..	45993b	66	997	51.5	+15 12	8.7	9.7	Ko	1	..	37568i
17	2618	51.1	-33 58	9.3	9.5	Go	3	..	44364b	67	1070	51.5	-1 50	8.47	8.47	Ao	4	..	12754b
18	961	51.1	-56 32	9.2	10.2	K	1	..	18484b	68	1270	51.5	-9 56	9.01	9.01	Ao	4	..	20546b
19	1187	51.2	+20 59	8.4	8.5	A2	5	..	37446i	69	1328	51.5	-11 41	9.1	9.2	A2	4	..	20581b
20	975	51.2	+11 30	6.08	6.86	G5	7	..	37568i	70	1329	51.5	-11 57	10.0	10.0	Ao	1	E	20581b
21	937	51.2	+10 17	9.1	9.1	Ao	2	..	38412b	71	1305	51.5	-13 8	7.84	7.82	B9	4	..	20485b
22	1118	51.2	+8 17	9.3	9.3	Ao	2	..	38412b	72	1220	51.5	-15 26	9.1	9.7	Go	2	..	12632b
23	1326	51.2	-11 40	8.6	9.1	F8	6	..	20581b	73	1219	51.5	-15 55	8.6	9.7	K2	2	..	12632b
24	1327	51.2	-11 56	9.8	9.9	A5	1	E	20581b	74	3244	51.5	-23 36	11.3	11.1	Ma	1	..	45993b
25	1217	51.2	-15 12	9.0	9.1	A3	4	..	12632b	75	3247	51.5	-23 45	9.8	8.6	A2	4	2,2	17395b
26	3545	51.2	-24 39	9.4	9.8	Ko	2	..	45993b	76	2595	51.5	-27 58	9.1	9.5	F5	2	..	42904b
27	2602	51.2	-29 7	9.6	9.9	Ko	2	..	42904b	77	2624	51.5	-33 57	8.7	9.0	F5	3	..	10682b
28	2710	51.2	-30 20	7.5	8.0	B9	8	..	42904b	78	2286	51.5	-38 16	8.7	9.5	K5	3	..	20649b
29	2832	51.2	-31 38	9.6	9.9	F2	2	..	44364b	79	2085	51.5	-47 12	7.6	8.2	Ko	5	..	12756b
30	2031	51.2	-48 8	9.2	9.4	G5	3	..	12756b	80	383	51.6	+70 38	9.2	9.3	A5	1	..	38169i
31	537	51.2	-62 33	9.2	9.2	B9	6	..	15147b	81	842	51.6	+61 21	9.5	9.6	A2	1	..	38154i
32	442	51.2	-68 27	8.8	10.0	K5	2	..	18485b	82	930	51.6	+59 53	8.01	9.08	K2	2	..	37407i
33	307	51.3	+73 53	8.9	9.0	A3	2	..	37343i	83	971	51.6	+54 33	6.26	7.26	Ko	4	0,4	37366i
34	507	51.3	+65 31	6.74	6.82	A3	6	2,9	36654i	84	1428	51.6	+49 55	6.07	6.85	G5	6	5,5	37428i
35	970	51.3	+54 17	3.88	4.88	Ko	..	5, R	2616c	85	1341	51.6	+38 53	7.27	8.34	K2	4	..	37429i
36	1021	51.3	+52 24	8.5	9.3	G5	2	..	37366i	86	939	51.6	+10 13	8.27	8.61	F2	3	..	38223i
37	1469	51.3	+40 47	7.62	7.68	A2	5	..	37429i	87	1074	51.6	+6 55	8.1	8.2	A2	3	..	14071i
38	957	51.3	+28 17	8.5	8.5	Ao	3	..	37377i	88	1263	51.6	-8 35	9.8	9.8	Ao	2	..	20546b
39	1145	51.3	+19 11	7.9	7.9	B9	7	..	37568i	89	1221	51.6	-15 31	8.4	9.2	G5	3	..	20485b
40	993	51.3	+15 45	7.9	8.5	Go	4	..	37568i	90	1301	51.6	-19 10	9.1	8.9	A3	5	..	17395b
41	956	51.3	+12 21	8.9	9.3	F5	2	..	38223i	91	2260	51.6	-39 59	5.63	7.5	K5	..	0,10	56,121
42	1351	51.3	-6 47	9.1	9.7	Go	2	..	20546b	92	340	51.6	-73 39	9.9	10.0	A2	3	..	24561b
43	1258	51.3	-8 37	9.4	9.8	F5	3	..	20546b	93	267	51.7	+74 30	8.2	9.6	Ma	2	..	37343i
44	1319	51.3	-10 7	9.06	9.06	Ao	5	..	20546b	94	418	51.7	+68 29	8.4	9.6	K5	2	E	38112i
45	1301	51.3	-16 49	9.1	9.9	G5	1	..	12632b	95	1429	51.7	+49 38	8.6	8.9	Fo	2	..	37366i
46	1235	51.3	-18 59	7.6	8.6	Ko	5	..	17395b	96	1071	51.7	+17 34	8.9	8.9	Ao	2	..	37568i
47	1261	51.3	-22 40	9.6	9.5	F2	3	..	17395b	97	977	51.7	+11 26	8.4	8.8	F5	3	E	37568i
48	3548	51.3	-24 17	9.3	8.9	A5	5	3,3	17395b	98	1302	51.7	-16 44	8.6	8.6	Ao	4	..	12632b
49	2783	51.3	-25 10	9.10	9.8	Ko	3	..	17395b	99	1298	51.7	-17 53	8.5	9.5	Ko	2	..	12632b
50	2604	51.3	-29 44	8.8	9.5	F8	3	..	42904b	100	1304	51.7	-21 42	6.80	7.4	Go	10	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

39900

5^h 50^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2205	50.4	-42 57	6.34	7.7	Ko	8	..	20649b	51	1062	50.8	+ 7 29	8.8	9.1	Fo	4	..	38412b
2	507	50.4	-65 17	7.96	8.2	Ao	7	0,3	18485b	52	1087	50.8	+ 2 26	9.1	9.2	A3	2	1,2	39866b
3	516	50.4	-67 5	9.0	9.0	Ao	6	..	18485b	53	1218	50.8	+ 0 49	7.6	7.6	Ao	8	..	39866b
4	529	50.4	-69 49	9.5	9.8	F2	5	0,2	15167b	54	1122	50.8	- 0 53	8.4	9.2	G5	5	..	12754b
5	1073	50.5	+46 41	7.8	8.2	F5	2	..	37366i	55	1411	50.8	- 2 14	10.3	10.3	A	2	..	12754b
6	1062	50.5	+31 1	9.5	9.5	A	1	R	37377i	56	1292	50.8	- 4 6	9.1	9.2	A2	5	..	20546b
7	971	50.5	+11 31	7.9	7.9	B9	5	..	37568i	57	1221	50.8	- 7 28	8.4	8.4	Ao	6	..	20546b
8	1064	50.5	- 1 5	9.1	9.2	A2	5	..	12754b	58	1220	50.8	- 7 41	7.8	8.8	Ko	5	..	20546b
9	1409	50.5	- 2 30	9.0	10.2	K5	1	..	12754b	59	1253	50.8	- 8 49	9.1	10.1	Ko	3	..	20546b
10	1289	50.5	- 4 38	5.98	6.98	Ko	6	..	37625i	60	2774	50.8	-25 28	8.8	9.5	Go	2	..	12664b
11	1288	50.5	- 4 50	7.10	7.10	Ao	6	..	37625i	61	2144	50.8	-40 1	9.55	9.8	G5	2	..	20649b
12	1439	50.5	- 5 41	9.8	9.8	B9	2	..	20546b	62	2215	50.8	-42 15	8.4	8.0	F2	8	..	20649b
13	1298	50.5	-21 17	8.6	8.9	K5	4	..	17395b	63	486	50.8	-64 4	6.42	7.3	Ko	8	R	38371b
14	2772	50.5	-25 17	8.8	10.3	K5	2	..	17395b	64		50.8	-64 4			A3			
15	2470	50.5	-37 33	7.32	7.6	A2	5	2,4	12665b	65	1019	50.9	+52 30	9.0	9.8	G5	2	..	37366i
16	2122	50.5	-41 49	10.7	10.4	Go	1	..	20649b	66	1220	50.9	+47 24	8.9	8.9	Ao	2	0,1	37366i
17	2114	50.5	-43 35	7.6	8.5	Go	6	..	20649b	67	1450	50.9	+42 50	8.0	8.5	F8	2	..	37429i
18	2077	50.5	-47 59	7.2	7.5	K2	8	..	12756b	68	1466	50.9	+40 48	8.1	8.2	A5	2	..	37429i
19	956	50.5	-56 29	7.4	8.3	Ko	6	..	18484b	69	1197	50.9	+33 7	8.4	8.5	A3	3	..	37377i
20	355	50.5	-76 12	9.5	9.8	Fo	6	..	15162b	70	1033	50.9	+24 14	6.02	5.85	B3	7	1,7 R	38084i
21	884	50.6	+58 53	8.9	8.9	Ao	3	..	37407i	71	1026	50.9	+18 21	8.9	8.9	Ao	3	..	37568i
22	1209	50.6	+45 6	8.17	9.17	Ko	1	..	37428i	72	1325	50.9	-11 15	9.8	9.8	Ao	2	..	20581b
23	1337	50.6	+38 37	7.83	9.01	K5	2	..	37429i	73	2616	50.9	-33 48	9.0	9.5	G5	4	..	44364b
24	1290	50.6	+36 1	8.2	8.3	A3	3	..	38124i	74	2216	50.9	-42 2	9.7	10.3	G5	1	..	20649b
25	1063	50.6	+30 35	7.8	9.0	K5	2	..	37377i	75	2218	50.9	-45 43	9.1	9.6	Ko	3	..	12756b
26	1060	50.6	+ 7 50	8.3	8.3	Ao	5	..	38412b	76	800	50.9	-52 32	9.1	9.4	Ko	1	..	24143b
27	1291	50.6	- 4 49	6.22	6.22	Ao	8	..	37625i	77	904	50.9	-57 55	9.6	9.6	A	2	..	18484b
28	1288	50.6	-16 59	9.1	9.7	Go	5	..	12632b	78	903	50.9	-57 56	8.3	8.9	G5	3	..	18484b
29	1259	50.6	-22 51	9.1	9.0	A2	4	..	17395b	79	495	50.9	-63 33	8.1	8.2	A3	9	..	15147b
30	2820	50.6	-31 10	8.0	9.5	Ko	4	..	44364b	80	530	50.9	-69 43	8.8	10.0	K5	3	5,1	15167b
31	2521	50.6	-34 20	8.8	10.4	K5	1	..	46181b	81	114	50.9	-83 20	8.4	9.0	Go	5	..	20557b
32	2580	50.6	-35 56	6.78	7.3	F2	8	3,8	9061b	82	1365	51.0	+37 31	7.56	8.63	K2	2	..	38124i
33	2143	50.6	-40 26	10.0	9.9	F8	2	..	20649b	83	1109	51.0	+22 50	var.	var.	Mb	2	0,2 R	38084i
34	2210	50.6	-42 29	10.3	9.5	F5	3	..	20649b	84	989	51.0	+15 59	8.9	9.0	A2	3	..	37568i
35	2215	50.6	-45 34	9.0	8.7	Ao	5	..	12756b	85	1016	51.0	+ 9 29	6.01	5.99	B9	8	..	38223i
36	958	50.6	-56 14	8.8	8.9	A2	5	..	18484b	86	1078	51.0	+ 4 54	9.40	9.40	Ao	2	..	38412b
37	901	50.6	-57 11	5.95	7.3	F5	..	0,10	56,121	87	1077	51.0	+ 3 51	8.1	8.5	F5	2	..	39866b
38	1292	50.7	+35 46	7.9	8.7	G5	3	..	38124i	88	1161	51.0	+ 1 47	9.3	9.4	A2	4	E	12754b
39	1136	50.7	+32 41	8.0	8.0	B9	4	..	37377i	89	1412	51.0	- 2 48	8.8	8.8	Ao	4	..	12754b
40	1061	50.7	+ 7 44	8.9	9.3	F5	4	..	38412b	90	1222	51.0	- 7 40	8.4	8.4	Ao	7	..	20546b
41	1070	50.7	+ 6 36	9.6	9.6	Ao	2	..	38412b	91	1268	51.0	- 9 25	9.1	9.4	Fo	3	..	20546b
42	1266	50.7	- 9 53	8.76	8.84	A3	5	..	20546b	92	1267	51.0	- 9 56	9.41	9.97	Go	2	..	20546b
43	3230	50.7	-23 58	9.3	9.2	Ko	3	..	17395b	93	1318	51.0	-10 52	9.1	10.1	K	1	E	20581b
44	2773	50.7	-25 36	9.3	10.1	F5	2	..	45993b	94	1302	51.0	-21 27	9.6	8.9	Ao	4	R	17395b
45	2558	50.7	-26 41	6.81	7.7	A3	9	..	12664b	95	2617	51.0	-33 38	8.8	9.2	Go	4	..	44364b
46	2613	50.7	-33 54	8.2	9.2	Ko	4	0,2	44364b	96	2582	51.0	-35 6	8.10	8.7	Fo	4	0,3	12665b
47	1392	50.8	+43 12	8.2	9.2	Ko	2	..	38935i	97	2127	51.0	-41 22	8.1	8.9	F8	6	..	20649b
48	1218	50.8	+34 9	9.4	9.4	Ao	2	E	38124i	98	2219	51.0	-45 57	10.3	10.2	A3	2	..	12756b
49	923	50.8	+27 18	7.7	8.5	G5	4	..	37377i	99	1663	51.0	-51 5	9.2	9.4	K2	2	..	24143b
50	1051	50.8	+21 44	9.1	9.4	F	1	..	38084i	100	305	51.1	+73 5	8.5	8.6	A2	4	..	37343i

THE HENRY DRAPER CATALOGUE.

40000

5^h 51^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1199	51.1	+33 15	7.43	7.93	F8	5	..	37377i	51	2623	51.3	-33 41	8.4	9.0	Ko	2	..	10682b
2	1011	51.1	+26 51	8.0	9.1	K2	2	E	37440i	52	2149	51.3	-40 4	10.9	10.1	A2	2	..	20649b
3	1119	51.1	+23 25	8.6	9.1	F8	2	..	38084i	53	2218	51.3	-42 40	10.3	10.1	Ko	2	..	20649b
4	1031	51.1	+18 22	8.9	8.9	Ao	2	..	37568i	54	2318	51.3	-44 42	9.9	9.6	Go	4	..	20649b
5	926	51.1	+16 21	6.91	6.74	B3	8	..	37568i	55	247	51.4	+75 35	6.52	7.70	K5	6	3,6	37343i
6	991	51.1	+15 4	7.59	8.59	Ko	3	..	37568i	56	1319	51.4	+41 45	8.1	8.1	B9	4	..	37429i
7	936	51.1	+10 33	8.9	9.7	G5	1	..	38412b	57	1056	51.4	+21 59	9.1	9.7	Go	2	..	38084i
8	1221	51.1	+ 0 9	9.3	10.1	G5	1	..	12754b	58	1441	51.4	- 5 54	9.4	10.0	Go	3	..	20546b
9	1413	51.1	- 2 12	8.6	8.6	Ao	3	..	12754b	59	1226	51.4	- 7 34	10.3	10.9	Go	2	..	20546b
10	1414	51.1	- 2 49	9.1	9.4	Fo	4	..	12754b	60	1236	51.4	-18 1	8.8	9.6	G5	3	..	12632b
11	1238	51.1	- 3 49	8.6	8.6	B8	7	1,2	20546b	61	619	51.5	+63 37	8.7	9.3	Go	3	..	38154i
12	1256	51.1	- 8 45	9.1	9.2	A5	3	..	20546b	62	1036	51.5	+55 19	6.48	6.54	A2	6	1,7 R	37366i
13	1216	51.1	-15 30	9.8	10.3	F8	2	..	12632b	63	976	51.5	+53 33	8.8	9.6	G5	1	..	37366i
14	1293	51.1	-17 12	10.0	10.0	Ao	2	..	12632b	64	1212	51.5	+45 50	7.8	8.6	G5	2	..	37428i
15	1292	51.1	-17 56	9.4	9.4	Ao	2	..	12632b	65	1039	51.5	+24 36	7.31	7.26	B8	5	E	37446i
16	3543	51.1	-24 34	9.8	10.1	Ko	1	..	45993b	66	997	51.5	+15 12	8.7	9.7	Ko	1	..	37568i
17	2618	51.1	-33 58	9.3	9.5	Go	3	..	44364b	67	1070	51.5	- 1 50	8.47	8.47	Ao	4	..	12754b
18	961	51.1	-56 32	9.2	10.2	K	1	..	18484b	68	1270	51.5	- 9 56	9.01	9.01	Ao	4	..	20546b
19	1187	51.2	+20 59	8.4	8.5	A2	5	..	37446i	69	1328	51.5	-11 41	9.1	9.2	A2	4	..	20581b
20	975	51.2	+11 30	6.08	6.86	G5	7	..	37568i	70	1329	51.5	-11 57	10.0	10.0	Ao	1	E	20581b
21	937	51.2	+10 17	9.1	9.1	Ao	2	..	38412b	71	1305	51.5	-13 8	7.84	7.82	B9	4	..	20485b
22	1118	51.2	+ 8 17	9.3	9.3	Ao	2	..	38412b	72	1220	51.5	-15 26	9.1	9.7	Go	2	..	12632b
23	1326	51.2	-11 40	8.6	9.1	F8	6	..	20581b	73	1219	51.5	-15 55	8.6	9.7	K2	2	..	12632b
24	1327	51.2	-11 56	9.8	9.9	A5	1	E	20581b	74	3244	51.5	-23 36	11.3	11.1	Ma	1	..	45993b
25	1217	51.2	-15 12	9.0	9.1	A3	4	..	12632b	75	3247	51.5	-23 45	9.8	8.6	A2	4	2,2	17395b
26	3545	51.2	-24 39	9.4	9.8	Ko	2	..	45993b	76	2595	51.5	-27 58	9.1	9.5	F5	2	..	42904b
27	2602	51.2	-29 7	9.6	9.9	Ko	2	..	42904b	77	2624	51.5	-33 57	8.7	9.0	F5	3	..	10682b
28	2710	51.2	-30 20	7.5	8.0	B9	8	..	42904b	78	2286	51.5	-38 16	8.7	9.5	K5	3	..	20649b
29	2832	51.2	-31 38	9.6	9.9	F2	2	..	44364b	79	2085	51.5	-47 12	7.6	8.2	Ko	5	..	12756b
30	2031	51.2	-48 8	9.2	9.4	G5	3	..	12756b	80	383	51.6	+70 38	9.2	9.3	A5	1	..	38169i
31	537	51.2	-62 33	9.2	9.2	B9	6	..	15147b	81	842	51.6	+61 21	9.5	9.6	A2	1	..	38154i
32	442	51.2	-68 27	8.8	10.0	K5	2	..	18485b	82	930	51.6	+59 53	8.01	9.08	K2	2	..	37407i
33	307	51.3	+73 53	8.9	9.0	A3	2	..	37343i	83	971	51.6	+54 33	6.26	7.26	Ko	4	0,4	37366i
34	507	51.3	+65 31	6.74	6.82	A3	6	2,9	36654i	84	1428	51.6	+49 55	6.07	6.85	G5	6	5,5	37428i
35	970	51.3	+54 17	3.88	4.88	Ko	..	5,R	2616c	85	1341	51.6	+38 53	7.27	8.34	K2	4	..	37429i
36	1021	51.3	+52 24	8.5	9.3	G5	2	..	37366i	86	939	51.6	+10 13	8.27	8.61	F2	3	..	38223i
37	1469	51.3	+40 47	7.62	7.68	A2	5	..	37429i	87	1074	51.6	+ 6 55	8.1	8.2	A2	3	..	14071i
38	957	51.3	+28 17	8.5	8.5	Ao	3	..	37377i	88	1263	51.6	- 8 35	9.8	9.8	Ao	2	..	20546b
39	1145	51.3	+19 11	7.9	7.9	B9	7	..	37568i	89	1221	51.6	-15 31	8.4	9.2	G5	3	..	20485b
40	993	51.3	+15 45	7.9	8.5	Go	4	..	37568i	90	1301	51.6	-19 10	9.1	8.9	A3	5	..	17395b
41	956	51.3	+12 21	8.9	9.3	F5	2	..	38223i	91	2260	51.6	-39 59	5.63	7.5	K5	..	0,10	56,121
42	1351	51.3	- 6 47	9.1	9.7	Go	2	..	20546b	92	340	51.6	-73 39	9.9	10.0	A2	3	..	24561b
43	1258	51.3	- 8 37	9.4	9.8	F5	3	..	20546b	93	267	51.7	+74 30	8.2	9.6	Ma	2	..	37343i
44	1319	51.3	-10 7	9.06	9.06	Ao	5	..	20546b	94	418	51.7	+68 29	8.4	9.6	K5	2	E	38112i
45	1301	51.3	-16 49	9.1	9.9	G5	1	..	12632b	95	1429	51.7	+49 38	8.6	8.9	Fo	2	..	37366i
46	1235	51.3	-18 59	7.6	8.6	Ko	5	..	17395b	96	1071	51.7	+17 34	8.9	8.9	Ao	2	..	37568i
47	1261	51.3	-22 40	9.6	9.5	F2	3	..	17395b	97	977	51.7	+11 26	8.4	8.8	F5	3	E	37568i
48	3548	51.3	-24 17	9.3	8.9	A5	5	3,3	17395b	98	1302	51.7	-16 44	8.6	8.6	Ao	4	..	12632b
49	2783	51.3	-25 10	9.10	9.8	Ko	3	..	17395b	99	1298	51.7	-17 53	8.5	9.5	Ko	2	..	12632b
50	2604	51.3	-29 44	8.8	9.5	F8	3	..	42904b	100	1304	51.7	-21 42	6.80	7.4	Go	10	..	17395b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

40100

5^h 51^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2562	51.7	-28 58	7.84	9.5	Mb	3	..	42904b	51	1269	52.0	-22 52	6.01	7.3	Ko	8	0,10	12664b
2	2479	51.7	-37 14	9.4	9.9	A5	2	..	42917b	52	2841	52.0	-31 54	7.9	8.9	Ko	2	..	10682b
3	2155	51.7	-40 26	9.6	11.0	K5	1	R	20649b	53	2267	52.0	-39 31	10.7	9.8	F5	3	..	20649b
4	2074	51.7	-46 40	9.2	9.6	A2	3	..	12756b	54	2227	52.0	-42 49	9.9	9.8	G5	3	..	20649b
5	1977	51.7	-50 24	6.50	7.2	Ko	8	5,8	12756b	55	1669	52.0	-51 52	9.0	9.2	Ko	3	..	15220b
6	538	51.7	-62 34	9.6	10.6	K	1	..	15147b	56	534	52.0	-69 56	7.76	8.2	F2	4	0,6-	9062b
7	420	51.7	-72 27	9.8	10.6	G5	2	..	15167b	57	356	52.0	-76 8	9.1	10.1	Ko	4	..	15162b
8	801	51.8	+62 19	8.0	9.0	Ko	3	..	38154i	58	190	52.1	+80 2	9.02	9.02	Ao	3	..	37558i
9	973	51.8	+54 23	8.6	8.6	Ao	4	2,4	37407i	59	407	52.1	+67 19	8.4	8.4	Ao	4	E	37545i
10	958	51.8	+28 11	8.8	8.8	B8	2	..	37377i	60	1075	52.1	+46 31	7.24	7.12	B5	5	0,4	38935i
11	1052	51.8	+25 57	4.90	4.71	B2	..	2,9	56,81	61	1374	52.1	+37 35	8.5	8.5	Ao	2	..	37429i
12	1036	51.8	+18 58	8.4	8.5	A2	4	2,3	37568i	62	1375	52.1	+37 4	8.5	8.5	B9	3	..	38124i
13	1088	51.8	+14 3	7.03	8.10	K2	4	..	37568i	63	1058	52.1	+29 37	7.81	7.79	B9	4	..	37377i
14	1052	51.8	+13 42	8.1	8.1	B9	6	..	37568i	64	1018	52.1	+26 12	9.0	9.1	A3	2	..	37440i
15	1075	51.8	+6 46	8.3	8.8	F8	1	..	39866b	65	1020	52.1	+9 35	8.7	8.7	Ao	3	..	38171i
16	1124	51.8	-0 23	9.3	9.9	Go	1	..	39866b	66	1076	52.1	+6 23	7.9	7.9	Ao	3	..	14071i
17	1073	51.8	-1 10	8.2	8.2	B9	8	..	12754b	67	1417	52.1	-2 32	9.1	9.2	A5	3	..	12754b
18	1227	51.8	-7 39	9.1	9.1	B9	5	..	20546b	68	1265	52.1	-8 24	6.87	7.65	G5	8	..	20546b
19	1321	51.8	-10 39	8.0	8.0	Ao	7	..	20581b	69	1323	52.1	-10 7	9.01	9.07	A2	5	..	20546b
20	1330	51.8	-11 17	8.0	9.1	K2	5	..	20485b	70	1232	52.1	-20 2	8.38	8.6	Go	4	..	17395b
21	1287	51.8	-14 38	9.8	9.8	Ao	2	..	12632b	71	1233	52.1	-20 21	9.0	9.2	A5	3	..	17395b
22	1306	51.8	-21 2	9.6	9.2	Go	2	..	17395b	72	1311	52.1	-21 39	9.4	9.6	A5	3	..	17395b
23	3253	51.8	-23 28	10.1	9.2	F8	3	..	17395b	73	3557	52.1	-24 6	7.65	9.0	K5	4	0,3	17395b
24	3552	51.8	-24 52	10.1	10.3	A5	2	..	45993b	74	2575	52.1	-26 51	9.0	9.8	G5	1	..	42904b
25	2613	51.8	-29 9	7.80	8.6	F2	5	..	42904b	75	2618	52.1	-29 53	9.40	9.2	B9	3	..	42904b
26	2614	51.8	-29 56	7.90	8.3	F8	5	..	42904b	76	2487	52.1	-37 8	5.02	6.7	Ko	..	0,R	28,198
27	2615	51.8	-29 59	8.34	9.2	Ko	2	..	42904b	77	2293	52.1	-38 34	10.7	9.5	Go	2	..	20649b
28	2534	51.8	-36 58	10.0	10.4	A3	1	..	46181b	78	2159	52.1	-40 42	9.1	9.8	Go	2	..	20649b
29	964	51.8	-56 42	8.6	8.7	G5	4	..	18484b	79	961	52.1	-53 44	8.8	9.6	F2	2	..	24143b
30	387	51.8	-71 23	9.2	10.0	G5	4	..	15167b	80	460	52.1	-70 49	10.7	10.8	A5	3	..	15167b
31	1074	51.9	+46 55	7.9	7.9	Ao	4	2,3	38935i	81	345	52.1	-75 3	9.48	9.4	Ao	5	..	15162b
32	1043	51.9	+24 37	7.96	7.91	B8	3	E	37446i	82	509	52.2	+65 3	7.45	8.45	Ko	6	5,4	38154i
33	959	51.9	+12 53	8.9	8.9	B8	2	..	37568i	83	1328	52.2	+44 56	2.07	2.07	Aop	..	R	28,198
34	1241	51.9	-3 5	8.6	8.6	Ao	5	..	12754b	84	1472	52.2	+40 2	7.37	7.79	F5	4	..	37429i
35	1228	51.9	-7 57	9.1	10.1	Ko	2	..	20546b	85	1093	52.2	+14 57	8.84	8.84	Ao	3	..	37568i
36	1286	51.9	-14 11	3.77	4.05	Fo	..	R	1670c	86	1091	52.2	+14 41	7.8	8.4	Go	4	..	37568i
37	1300	51.9	-17 15	8.0	8.3	Fo	5	..	12632b	87	1123	52.2	+8 4	9.6	10.2	Go	1	..	38412b
38	1307	51.9	-21 9	6.96	6.7	Ao	10	..	17395b	88	1082	52.2	+4 59	7.71	7.85	A5	3	..	14071i
39	2132	51.9	-41 40	8.7	8.3	Ao	7	..	20649b	89	1266	52.2	-8 45	9.1	9.4	Fo	4	..	20546b
40	420	52.0	+66 53	7.7	8.9	K5	4	5,3	37545i	90	1275	52.2	-9 49	9.01	10.08	K2	3	..	20546b
41	1083	52.0	+56 54	7.57	8.35	G5	4	..	37407i	91	1333	52.2	-11 46	9.1	9.9	G5	2	E	20581b
42	1023	52.0	+52 20	8.6	8.9	Fo	3	..	37366i	92	1306	52.2	-13 10	7.8	8.3	F8	3	..	20485b
43	1216	52.0	+45 37	6.60	6.60	Ao	5	..	37391i	93	1270	52.2	-22 39	9.1	8.6	B8	5	..	17395b
44	1053	52.0	+25 34	8.4	9.4	Ko	2	0,2	37440i	94	3259	52.2	-23 23	10.3	9.8	Go	2	..	17395b
45	1416	52.0	-2 10	8.6	8.9	Fo	5	..	12754b	95	2844	52.2	-31 33	6.75	6.6	B9	8	..	9061b
46	1243	52.0	-3 46	9.6	9.6	Ao	3	..	20546b	96	2538	52.2	-34 27	8.7	9.6	Fo	5	..	44364b
47	1274	52.0	-9 19	8.0	8.8	G5	4	..	20546b	97	2134	52.2	-41 26	10.0	10.4	G5	1	..	20649b
48	1303	52.0	-17 50	9.1	9.1	B8	4	..	12632b	98	2135	52.2	-41 54	10.7	10.4	Go	1	..	20649b
49	1309	52.0	-21 30	8.4	8.3	G5	7	..	17395b	99	2089	52.2	-47 40	8.6	8.5	Go	5	..	12756b
50	1268	52.0	-22 17	8.8	8.3	F8	6	..	17395b	100	1945	52.2	-49 39	6.16	6.2	B5	10	..	24143b

THE HENRY DRAPER CATALOGUE.

40200

5^h 52^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	541	52.2	-61 52	6.94	7.7	Ao	7	..	20516b	51	2227	52.5	-45 50	8.1	8.5	Ko	5	..	12756b
2	557	52.3	+64 58	8.80	9.36	Go	3	..	38154i	52	219	52.5	-77 36	10.4	10.5	A3	3	..	15162b
3	1038	52.3	+55 32	8.7	9.2	F8	3	..	37407i	53	1431	52.6	+49 59	9.12	9.40	Fo	2	..	37366i
4	1139	52.3	+51 4	6.63	6.63	Ao	7	1,6	37366i	54	1154	52.6	+31 2	9.4	9.4	B8	1	..	37377i
5	1329	52.3	+44 7	7.7	8.7	Ko	2	..	38935i	55	1062	52.6	+29 59	7.06	7.14	A3	6	..	37377i
6	1322	52.3	+41 55	7.82	7.82	Ao	5	..	37429i	56	935	52.6	+27 36	8.2	8.2	B9	3	..	37377i
7	1130	52.3	+23 9	7.53	8.53	Ko	4	..	37446i	57	1003	52.6	+15 49	8.7	8.8	A2	2	..	37568i
8	1230	52.3	+0 24	8.9	8.9	A	7	..	12754b	58	1023	52.6	+9 56	8.22	8.64	F5	3	..	38223i
9	1229	52.3	+0 23	9.3	9.3	A	7	..	12754b	59	1096	52.6	+2 4	8.3	8.6	Fo	6	2,6	12754b
10	1227	52.3	+0 1	6.82	6.82	Ao	7	..	38205i	60	1420	52.6	-2 39	8.6	8.9	Fo	5	..	12754b
11	1418	52.3	-2 30	9.0	9.8	G5	2	..	12754b	61	1447	52.6	-5 57	9.8	9.8	B8	2	..	20546b
12	1354	52.3	-6 12	8.6	9.0	F5	5	..	20546b	62	1357	52.6	-6 23	9.6	10.0	F5	2	..	20546b
13	3262	52.3	-23 25	9.6	9.8	Ko	1	..	17395b	63	1336	52.6	-11 50	9.4	10.0	Go	2	..	20581b
14	3558	52.3	-24 41	10.3	10.1	Go	2	..	45993b	64	1243	52.6	-18 36	9.4	9.9	F8	1	..	12632b
15	2630	52.3	-33 45	10.0	9.2	Go	3	..	44364b	65	1236	52.6	-20 40	9.1	8.9	Ao	4	..	17395b
16	2296	52.3	-38 7	7.41	7.7	F5	10	..	20649b	66	1312	52.6	-21 47	9.0	8.9	Fo	4	..	17395b
17	2161	52.3	-40 46	10.4	9.9	Go	2	..	20649b	67	1271	52.6	-22 18	9.6	9.2	B8	3	..	17395b
18	2136	52.3	-41 6	10.2	10.4	Ko	1	..	20649b	68	2586	52.6	-26 47	9.1	9.6	A2	2	..	42904b
19	2327	52.3	-44 35	8.7	9.0	F5	4	..	20649b	69	2611	52.6	-27 4	9.1	9.5	F8	3	..	42904b
20	1947	52.3	-49 1	9.3	9.4	F5	4	0,4	12756b	70	2299	52.6	-38 39	9.0	10.4	K5	1	..	20649b
21	967	52.3	-56 12	9.0	9.2	A2	5	..	18484b	71	2162	52.6	-40 16	9.4	9.5	G5	2	..	20649b
22	543	52.3	-61 25	9.0	8.6	Ao	7	..	15147b	72	2233	52.6	-42 42	10.1	9.8	F5	3	..	20649b
23	388	52.3	-71 54	9.7	10.3	Go	4	..	15167b	73	1671	52.6	-51 1	7.9	7.7	F2	6	..	24143b
24	154	52.3	-81 10	9.0	10.0	Ko	2	..	20557b	74	964	52.6	-53 36	7.8	8.3	A3	6	..	24143b
25	311	52.4	+74 1	7.34	7.84	F8	5	..	37343i	75	506	52.6	-60 6	9.34	10.1	G5	2	..	15147b
26	978	52.4	+53 13	9.4	10.5	K2	..	..	M	76	539	52.6	-62 50	9.8	9.9	A2	2	..	15147b
27	963	52.4	+12 53	8.3	8.3	B9	6	..	37568i	77	462	52.6	-70 30	8.5	8.6	A2	3	3,9-	9062b
28	1124	52.4	+8 14	8.7	9.0	Fo	3	..	38412b	78	1331	52.7	+48 53	8.7	8.7	Ao	3	..	38935i
29	1068	52.4	+7 30	9.6	10.1	F8	1	..	38412b	79	1330	52.7	+48 14	8.4	8.4	Ao	4	0,3	37428i
30	1069	52.4	+7 22	9.3	9.6	Fo	2	..	38412b	80	1058	52.7	+25 46	6.61	7.61	Ko	..	0,4-	56,81
31	1300	52.4	-4 0	9.8	10.2	F5	2	..	20546b	81	965	52.7	+12 59	8.5	9.5	Ko	2	..	37568i
32	1231	52.4	-7 18	9.8	9.8	Ao	2	..	20546b	82	1168	52.7	+1 13	6.49	7.56	K2	7	2,4	39866b
33	1325	52.4	-10 52	7.8	8.8	Ko	5	..	20581b	83	1075	52.7	-1 49	9.3	9.3	B9	4	..	12754b
34	1240	52.4	-18 18	7.8	7.9	A2	7	..	12632b	84	1273	52.7	-22 55	10.3	9.8	Go	2	..	17395b
35	3263	52.4	-23 14	6.41	7.8	Ko	7	0,10	12664b	85	2301	52.7	-38 18	9.0	8.7	Ao	7	..	20649b
36	2847	52.4	-31 3	9.8	9.8	Ao	3	..	44364b	86	2167	52.7	-40 19	10.9	10.3	Go	1	..	20649b
37	2596	52.4	-35 7	8.60	9.9	K2	3	0,2	46181b	87	2139	52.7	-41 28	11.4	10.4	A	1	..	20649b
38	2597	52.4	-35 20	9.4	10.4	A3	3	..	46181b	88	2138	52.7	-41 44	10.2	9.8	Go	3	..	20649b
39	1217	52.5	+45 56	4.59	5.94	Ma	7	0,7 R	37428i	89	2328	52.7	-44 48	10.1	9.9	F5	2	..	20649b
40	1402	52.5	+43 59	7.9	8.9	Ko	1	..	38935i	90	2095	52.7	-47 44	9.1	9.9	Ko	1	..	12756b
41	1045	52.5	+24 48	7.61	8.39	G5	3	..	37446i	91	1949	52.7	-49 40	8.4	8.8	Ko	3	0,2	12756b
42	1132	52.5	+23 39	7.8	9.2	Ma	2	..	37446i	92	805	52.7	-52 40	5.30	6.1	A5	..	..	28,198
43	1063	52.5	+21 29	8.6	8.7	A2	3	..	37446i	93	903	52.7	-55 52	8.9	9.8	Ko	2	..	18484b
44	1095	52.5	+2 35	9.1	9.4	Fo	3	5,3-	39866b	94	507	52.7	-60 40	9.7	10.5	G5	3	..	15147b
45	1267	52.5	-8 26	9.1	9.2	A2	3	..	20546b	95	389	52.7	-72 0	10.2	10.3	A2	3	2,2	15167b
46	1309	52.5	-13 16	10.3	10.3	A	2	..	20581b	96	357	52.7	-76 34	9.4	10.6	K5	4	..	20652b
47	2584	52.5	-26 33	8.0	9.0	Fo	4	..	42904b	97	938	52.8	+27 33	7.9	7.9	B9p	5	R	37377i
48	2848	52.5	-31 24	5.54	5.9	Fo	9	R	56,121	98	1066	52.8	+21 14	8.6	8.6	B9	4	..	37446i
49	2543	52.5	-34 17	9.3	10.5	K5	1	..	44364b	99	1197	52.8	+20 44	9.0	9.6	Go	2	..	37446i
50	2226	52.5	-45 36	9.2	9.6	Ko	2	..	12756b	100	1077	52.8	+6 31	8.1	8.6	F8	2	..	39866b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

41500

6^h 0^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1089	m. 0.5	° 5 45	7.7	7.7	B9	5	..	38171i	51	2688	m. 0.7	° -28 36	9.0	8.7	Ao	3	..	42904b
2	1121	0.5	+ 3 47	9.6	10.1	F8	1	..	15138b	52	2709	0.7	-33 32	9.1	9.9	Ko	1	..	44364b
3	1108	0.5	- 1 14	8.9	9.0	A2	3	..	12682b	53	999	0.7	-53 35	6.98	8.3	Ko	9	..	20547b
4	1470	0.5	- 2 39	9.1	9.1	Ao	5	..	12754b	54	951	0.7	-54 7	8.8	9.8	G	1	..	20547b
5	1351	0.5	- 4 36	8.9	8.9	Ao	5	1,4	20894b	55	609	0.7	-58 13	8.0	9.2	K2	5	..	18484b
6	1311	0.5	- 8 10	9.7	10.9	K5	1	..	20546b	56	407	0.7	-71 12	8.7	9.7	Ko	5	2,3	15167b
7	1312	0.5	- 8 57	9.1	9.1	Ao	4	..	20546b	57	224	0.7	-77 54	10.1	10.9	G5	2	..	20652b
8	1345	0.5	-13 9	9.7	10.5	G5	3	..	20581b	58	209	0.7	-78 21	10.4	11.2	G5	2	..	20652b
9	1344	0.5	-13 45	8.5	9.6	K2	4	..	20581b	59	426	0.8	+68 4	9.2	9.3	A2	2	..	38169i
10	1265	0.5	-15 25	8.9	9.5	Go	3	..	12632b	60	1455	0.8	+49 57	8.47	8.53	A2	2	..	37419i
11	1349	0.5	-16 29	5.04	5.04	Ao	..	2,9	56,81	61	1247	0.8	+45 4	8.42	9.49	K2	1	..	37397i
12	1291	0.5	-18 4	7.93	8.93	Ko	4	..	12632b	62	1341	0.8	+35 42	8.6	9.6	Ko	1	..	38126i
13	1345	0.5	-19 29	8.3	7.6	B9	8	..	12632b	63	1079	0.8	+26 40	7.50	8.50	Ko	2	2,3	37377i
14	2692	0.5	-26 32	9.3	9.8	Go	1	..	42904b	64	1260	0.8	+20 44	8.8	8.9	A5	2	..	37446i
15	511	0.5	-63 44	8.8	10.0	K5	3	..	15147b	65	1259	0.8	+20 7	8.95	8.95	Ao	1	..	37446i
16	355	0.5	-75 43	9.5	10.5	Ko	3	..	20652b	66	1108	0.8	+13 14	8.9	8.9	Ao	3	..	37568i
17	857	0.6	+61 28	8.9	9.3	F5	3	..	38154i	67	1111	0.8	+ 6 29	8.8	9.3	F8	2	..	38411b
18	1091	0.6	+56 12	8.0	8.1	A2	6	..	37407i	68	1110	0.8	+ 6 2	7.9	7.9	Ao	4	..	38171i
19	1271	0.6	+50 45	9.2	10.0	G5	1	E	37419i	69	1404	0.8	- 6 6	8.5	8.6	A3	4	..	20546b
20	1454	0.6	+49 29	8.0	8.0	Ao	3	..	37428i	70	1347	0.8	-13 25	9.1	10.1	Ko	3	..	20581b
21	1099	0.6	+46 40	8.2	9.2	Ko	1	..	38935i	71	2691	0.8	-28 3	7.19	7.5	Ao	8	..	12664b
22	1454	0.6	+43 48	8.8	8.8	Ao	3	..	37397i	72	2689	0.8	-28 37	7.77	8.7	G5	3	..	42904b
23	1360	0.6	+36 16	6.86	6.84	B9	8	0,6	38126i	73	2712	0.8	-33 56	8.5	9.9	K2	2	..	44364b
24	1260	0.6	+34 50	8.2	8.2	Ao	4	..	38126i	74	2354	0.8	-39 49	8.0	9.2	Ko	5	..	20649b
25	1190	0.6	+32 13	8.5	8.6	A5	3	..	37377i	75	2202	0.8	-41 42	10.9	9.8	F8	2	..	20649b
26	1092	0.6	+24 46	8.7	8.7	Ao	2	..	37446i	76	838	0.8	-52 7	8.1	8.5	F5	5	..	20547b
27	1091	0.6	+18 33	8.5	8.5	B9	3	1,3	37568i	77	210	0.8	-78 5	10.6	10.6	Ao	3	..	20652b
28	1272	0.6	+ 0 28	8.9	9.0	A2	3	0,2	15138b	78	1248	0.9	+45 33	7.32	7.32	Ao	5	..	37428i
29	1353	0.6	- 4 20	9.5	9.5	Ao	2	..	20894b	79	1520	0.9	+39 45	8.5	8.8	Fo	2	..	37397i
30	1352	0.6	- 4 47	8.9	8.9	Ao	5	1,7	20546b	80	1004	0.9	+10 45	7.3	7.3	Ao	7	..	37579i
31	1495	0.6	- 5 24	8.5	9.5	Ko	5	..	20546b	81	1088	0.9	+ 9 11	8.9	9.7	G5	2	..	38171i
32	1328	0.6	-14 18	8.7	9.7	Ko	4	..	20581b	82	1121	0.9	+ 4 35	9.6	9.6	Ao	2	..	38411b
33	2737	0.6	-29 37	8.3	9.8	K5	2	..	42904b	83	1405	0.9	- 6 20	8.5	8.5	B9	4	..	20546b
34	2743	0.6	-32 10	5.64	5.47	B3	..	..	56,122	84	2906	0.9	-25 16	8.7	9.2	Fo	4	..	42904b
35	2159	0.6	-47 56	9.4	10.4	Ko	1	..	15220b	85	2355	0.9	-39 47	10.4	9.5	F	2	..	20649b
36	2111	0.6	-48 33	9.8	10.0	Ko	1	..	15220b	86	537	0.9	-60 6	6.50	8.3	Ma	8	5,8	15147b
37	836	0.6	-52 10	8.6	8.8	F5	4	..	20547b	87	557	0.9	-69 58	9.30	10.9	K5	1	..	15167b
38	837	0.6	-52 51	8.5	8.5	Ao	6	..	20547b	88	816	1.0	+62 32	9.2	9.3	A2	1	..	38154i
39	950	0.6	-54 22	8.9	10.1	G5	2	..	20547b	89	1058	1.0	+55 59	7.82	8.82	Ko	4	..	37408i
40	536	0.6	-60 13	9.5	10.5	Ko	2	..	15147b	90	1035	1.0	+52 25	8.6	9.7	K2	1	..	37419i
41	1486	0.7	+42 41	6.88	6.76	B5	5	0,5	37428i	91	1488	1.0	+42 52	8.5	8.5	B9	4	1,2	37397i
42	1382	0.7	+38 5	7.05	8.05	Ko	5	5,2	38126i	92	1199	1.0	+23 4	8.7	8.7	B9	4	..	37446i
43	1192	0.7	+23 39	6.89	7.89	Ko	6	..	37446i	93	1065	1.0	+15 34	7.6	8.6	Ko	6	..	37568i
44	1116	0.7	+21 54	8.2	9.2	Ko	2	..	37446i	94	1123	1.0	+ 3 21	8.3	9.3	Ko	1	..	38171i
45	997	0.7	+16 50	8.3	8.4	A2	2	..	37568i	95	1497	1.0	- 5 3	8.35	8.43	A3	6	2,7	20546b
46	1313	0.7	- 8 17	9.7	10.7	Ko	1	..	20546b	96	996	1.0	-56 56	8.1	9.5	K5	3	..	18484b
47	1368	0.7	-10 14	5.79	6.07	Fo	4	..	2345b	97	897	1.1	+58 57	5.42	6.42	Ko	6	E	37407i
48	1367	0.7	-10 38	9.5	9.6	A2	3	..	20581b	98	1522	1.1	+39 13	8.0	8.4	F5	2	..	37429i
49	1368	0.7	-12 56	9.9	10.7	G5	2	..	20581b	99	1364	1.1	+36 5	7.11	8.18	K2	5	2,2	38126i
50	1345	0.7	-21 41	9.1	9.5	K2	2	..	12466b	100	1082	1.1	+26 42	7.01	6.99	B9	5	..	37377i

THE HENRY DRAPER CATALOGUE.

41600

6^h 1^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1173	1.1	+22 7	8.6	9.7	K2	2	..	37446i	51	2410	1.3	-44 7	9.8	9.6	Fo	3	..	20649b
2	999	1.1	+16 23	6.51	7.51	Ko	6	..	37568i	52	1002	1.3	-53 53	7.1	8.6	K2	6	..	20547b
3	1131	1.1	+7 31	8.3	8.3	B9	4	..	38171i	53	227	1.3	-77 14	9.5	10.5	Ko	4	..	20652b
4	1129	1.1	+2 27	8.9	8.9	B8	3	0,1	15138b	54	942	1.4	+57 26	9.0	9.0	Ao	2	..	37408i
5	1168	1.1	-0 43	9.6	9.6	A	1	..	12682b	55	1038	1.4	+52 46	8.5	8.5	Ao	3	..	37419i
6	1356	1.1	-4 34	9.1	9.1	B9	6	0,4	20894b	56	1266	1.4	+34 51	7.87	8.94	K2	3	..	38126i
7	1357	1.1	-4 44	9.5	9.6	A2	2	..	20894b	57	1265	1.4	+20 50	7.9	9.0	K2	3	..	37446i
8	1499	1.1	-5 52	7.17	8.52	Ma	7	..	20546b	58	1095	1.4	+18 49	8.3	8.6	Fo	5	2,4	37446i
9	1407	1.1	-6 37	7.9	8.0	A2	5	..	20546b	59	1129	1.4	+17 30	8.9	9.3	F5	3	..	37568i
10	1279	1.1	-20 16	8.9	9.8	K	1	..	12466b	60	1149	1.4	+14 36	8.3	8.4	A2	2	..	37579i
11	2233	1.1	-40 57	10.0	10.4	Ko	1	..	20649b	61	1172	1.4	-0 58	7.7	8.0	F2	7	0,5-	12682b
12	2205	1.1	-41 9	7.6	8.1	F5	9	..	20649b	62	1282	1.4	-7 30	9.9	9.9	Ao	2	..	20546b
13	225	1.1	-77 51	10.2	10.3	A3	3	..	20652b	63	1317	1.4	-8 52	9.1	9.4	Fo	4	..	20581b
14	1175	1.2	+22 45	9.4	9.4	Ao	2	..	37446i	64	1328	1.4	-9 36	9.5	10.0	F8	2	..	20581b
15	1000	1.2	+16 11	7.7	7.8	A3	4	..	37579i	65	1327	1.4	-9 48	9.5	10.5	K	1	..	20581b
16	1147	1.2	+14 14	7.7	8.0	Fo	6	..	37568i	66	1350	1.4	-13 14	7.7	8.0	Fo	10	..	20581b
17	1022	1.2	+12 2	8.3	9.3	K	3	R	37568i	67	2753	1.4	-32 59	8.7	9.5	Go	2	..	10682b
18	1187	1.2	+8 27	9.6	9.6	Ao	2	..	38411b	68	2579	1.4	-37 59	10.0	10.8	K2	1	..	20527b
19	1095	1.2	+5 8	9.6	10.4	G5	1	..	38411b	69	2403	1.4	-38 44	8.7	9.4	Fo	4	..	20527b
20	1214	1.2	+1 47	9.6	9.7	A2	3	..	15138b	70	2173	1.4	-47 26	9.4	10.4	Ko	1	..	15220b
21	1278	1.2	+0 1	8.28	9.28	Ko	2	5,2	15138b	71	1093	1.5	+56 17	8.0	8.1	A2	4	..	37407i
22	1500	1.2	-5 38	9.1	9.5	F5	3	..	20894b	72	1158	1.5	+51 32	8.0	8.0	Ao	3	..	37419i
23	1326	1.2	-9 21	9.1	9.4	Fo	3	..	20581b	73	1101	1.5	+46 10	9.2	10.3	K2	1	..	38935i
24	1372	1.2	-10 12	9.1	9.1	Ao	2	..	20581b	74	1422	1.5	+37 45	8.2	8.5	F2	1	..	37428i
25	1349	1.2	-13 58	10.2	10.5	Fo	2	..	20581b	75	1004	1.5	+16 44	7.9	7.9	Ao	6	0,5	37579i
26	1330	1.2	-14 0	9.9	10.3	F5	2	..	20581b	76	1150	1.5	+14 28	7.7	8.8	K2	3	..	37568i
27	1349	1.2	-17 13	8.9	8.9	Ao	3	..	12632b	77	1173	1.5	-0 41	10.3	10.3	A	1	..	12682b
28	2909	1.2	-25 1	7.80	7.7	Ao	6	0,8	12664b	78	1111	1.5	-1 1	8.9	9.2	F2	3	..	12682b
29	2630	1.2	-36 10	9.4	10.2	F5	2	..	20527b	79	1501	1.5	-5 26	10.2	11.2	K	1	..	20894b
30	2631	1.2	-36 39	7.8	8.7	B9	5	..	42917b	80	1374	1.5	-10 52	8.5	8.9	F5	5	..	20581b
31	2629	1.2	-36 42	8.0	10.8	K	2	..	46181b	81	1382	1.5	-11 31	9.1	9.2	A5	6	..	20581b
32	2314	1.2	-42 50	10.9	10.8	F5	1	..	20649b	82	2731	1.5	-27 11	8.3	9.5	G5	1	..	42904b
33	2297	1.2	-45 43	9.1	9.7	K5	2	..	15220b	83	2703	1.5	-28 40	8.0	8.0	F2	7	..	42904b
34	226	1.2	-77 11	9.6	10.6	Ko	3	2,3	20652b	84	2754	1.5	-32 43	8.0	8.0	A2	6	..	42904b
35	1457	1.3	+49 7	8.4	8.4	Ao	4	..	37428i	85	2678	1.5	-35 47	9.6	10.0	Ko	4	..	20527b
36	1365	1.3	+41 4	6.42	7.42	Ko	5	..	37429i	86	568	1.5	-61 42	8.5	9.7	Fo	3	..	15147b
37	1421	1.3	+38 0	7.02	7.08	A2	7	1,4	38126i	87	512	1.5	-64 51	7.04	7.8	Go	7	..	18485b
38	1265	1.3	+34 11	7.7	7.7	B9	7	..	38126i	88	359	1.5	-76 0	9.8	10.6	G5	3	..	20652b
39	991	1.3	+27 53	8.6	8.6	B9	3	..	37377i	89	818	1.6	+62 20	8.6	8.4	B3	5	..	38154i
40	1001	1.3	+16 34	7.18	7.60	F5	6	..	37568i	90	1120	1.6	+21 53	8.0	7.8	B2	5	..	37446i
41	1116	1.3	+6 44	7.9	8.0	A5	5	..	38171i	91	1121	1.6	+6 43	8.9	8.9	Ao	2	..	38171i
42	1360	1.3	-4 45	9.1	9.2	A5	3	2,3	12754b	92	1362	1.6	-4 11	5.37	5.20	B3	..	2,8	56,81
43	1280	1.3	-7 5	8.5	9.5	Ko	3	..	20546b	93	1319	1.6	-8 21	8.5	9.5	Ko	5	..	20546b
44	1278	1.3	-7 18	7.9	8.9	Ko	7	..	20546b	94	1373	1.6	-12 33	10.6	11.2	Go	1	..	20581b
45	1279	1.3	-7 37	7.28	8.28	Ko	8	..	20546b	95	1331	1.6	-14 56	4.67	4.67	Ao	..	0,8R	56,81
46	1369	1.3	-12 14	10.2	10.5	Fo	2	..	20581b	96	1349	1.6	-19 56	9.7	9.5	A	1	E	12466b
47	1353	1.3	-16 14	8.1	8.9	G5	5	..	12632b	97	1282	1.6	-20 40	8.6	8.6	A2	3	..	12466b
48	1352	1.3	-16 31	9.1	9.9	G5	1	..	12632b	98	3679	1.6	-24 11	var.	var.	Mc	6	5,8R	42904b
49	1354	1.3	-16 57	7.7	7.7	Ao	8	..	12632b	99	2978	1.6	-31 13	10.4	10.1	Ao	1	..	42904b
50	2221	1.3	-43 52	8.8	10.2	Ko	1	E	20555b	100	2300	1.6	-45 2	6.22	7.0	F8	5	..	42923b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

41700

6^h 1^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2301	1.6	-45 11	6.80	7.7	Ko	3	..	42923b	51	1121	1.9	+30 16	8.4	9.2	G5	2	..	37377i
2	1736	1.6	-51 6	7.9	7.5	A2	7	..	24143b	52	1208	1.9	+23 46	8.2	8.2	B8	4	..	37446i
3	840	1.6	-52 18	8.5	8.6	Ao	5	..	20547b	53	1152	1.9	+14 47	4.40	4.21	B2	..	R	2483c
4	517	1.6	-63 32	8.8	9.3	F8	4	..	15147b	54	1094	1.9	+9 12	7.9	7.9	B8	4	..	38171i
5	276	1.7	+74 2	9.2	9.6	F5	2	..	37343i	55	1286	1.9	+0 50	8.9	8.9	Ao	4	0.4	12682b
6	427	1.7	+68 56	9.0	9.5	F8	2	..	38169i	56	1297	1.9	-3 20	6.75	6.63	B5	8	..	12682b
7	1252	1.7	+47 41	8.9	9.0	A2	2	R	38935i	57	3685	1.9	-24 55	8.75	8.4	B9	6	0.4	42904b
8	994	1.7	+27 27	8.2	8.8	Go	2	..	37377i	58	2984	1.9	-31 23	8.7	9.8	G5	2	..	42904b
9	1088	1.7	+26 25	7.8	7.8	Ao	4	..	37446i	59	2684	1.9	-35 30	5.89	5.95	A2	..	2.8	28,198
10	1180	1.7	+22 43	7.30	8.08	G5	5	..	37446i	60	843	1.9	-52 13	9.0	9.1	F8	2	..	20547b
11	1098	1.7	+18 56	7.7	8.2	F8	5	0.4	37568i	61	954	1.9	-54 7	8.9	9.8	G5	1	..	20547b
12	1092	1.7	+9 11	7.7	8.0	F2	6	..	38171i	62	536	1.9	-65 20	9.0	9.1	A3	4	..	18485b
13	1134	1.7	+7 56	9.1	10.1	Ko	1	..	38171i	63	428	2.0	+68 57	9.2	9.5	F2	3	..	38169i
14	1123	1.7	+6 37	8.9	9.0	A3	3	..	38411b	64	1459	2.0	+49 4	7.9	9.1	K5	2	..	37428i
15	1132	1.7	+2 12	7.7	7.7	Ao	8	..	38171i	65	1369	2.0	+41 34	7.7	7.7	B8	3	..	37429i
16	1296	1.7	-3 56	9.1	9.1	Ao	4	0.4	20894b	66	1109	2.0	+24 55	8.66	8.66	Ao	3	..	37440i
17	1375	1.7	-12 31	8.9	9.3	F5	5	..	20581b	67	1209	2.0	+23 52	8.6	8.6	Ao	4	..	37440i
18	1374	1.7	-12 47	10.4	10.9	F8	2	..	20581b	68	1183	2.0	+22 28	9.8	9.8	B9	1	..	37446i
19	2825	1.7	-30 30	9.0	9.5	F2	2	..	42904b	69	1124	2.0	+6 18	9.3	10.5	K5	1	..	38411b
20	2408	1.7	-38 41	9.3	9.5	F5	3	..	20527b	70	1218	2.0	+1 31	7.8	8.1	F2	6	0.4	38205i
21	2361	1.7	-39 42	10.0	9.4	Ao	3	..	20649b	71	1364	2.0	-4 49	9.1	9.4	Fo	5	0.4	20894b
22	2322	1.7	-42 21	9.6	9.4	A5	4	..	20649b	72	1322	2.0	-8 41	9.9	10.0	A2	3	..	20581b
23	2119	1.7	-48 1	9.6	9.7	A	2	..	15220b	73	1376	2.0	-10 28	10.2	10.2	A	1	..	20581b
24	1345	1.8	+35 8	7.67	7.73	A2	5	R	38126i	74	1376	2.0	-12 50	9.1	9.1	Ao	4	..	20581b
25	1345	1.8	+35 8	7.67	7.73	G	5	R	38126i	75	2759	2.0	-32 5	10.0	10.1	K	1	R	42904b
26	1124	1.8	+25 56	8.0	8.4	F5	3	..	37440i	76	2760	2.0	-32 18	9.6	9.8	Ko	2	..	42904b
27	1125	1.8	+25 28	8.0	8.0	B9	3	..	37440i	77	2325	2.0	-42 51	9.8	10.9	Ko	1	..	20649b
28	1182	1.8	+22 1	8.6	9.1	F8	2	..	37446i	78	2419	2.0	-44 54	8.34	9.3	K5	3	..	20555b
29	1069	1.8	+15 37	8.3	8.4	A5	4	..	37568i	79	844	2.0	-52 53	8.1	8.5	F2	7	..	20547b
30	1025	1.8	+12 28	8.9	8.9	Ao	2	..	37568i	80	569	2.0	-62 40	9.3	9.6	Fo	4	..	15147b
31	1127	1.8	+3 22	8.7	9.0	F2	1	..	38171i	81	408	2.0	-71 33	9.6	10.0	F5	3	..	15167b
32	1217	1.8	+1 51	8.8	8.9	A2	2	..	38205i	82	931	2.1	+60 28	6.79	8.14	Ma	5	0.4	38239i
33	1285	1.8	+0 6	7.43	8.50	K2	5	0.4	12682b	83	948	2.1	+59 11	7.20	8.20	Ko	3	E	37407i
34	1176	1.8	-0 13	8.7	8.7	Ao	6	0.5	12682b	84	1374	2.1	+44 40	8.6	9.6	Ko	1	..	38935i
35	1352	1.8	-13 21	10.8	11.1	Fo	1	..	20581b	85	1122	2.1	+30 35	8.0	8.8	G5	3	..	37377i
36	1301	1.8	-18 3	8.5	8.8	F2	5	..	12632b	86	1125	2.1	+21 19	7.8	8.1	Fo	6	..	37446i
37	1299	1.8	-18 53	9.3	9.3	Ao	3	..	12630b	87	1101	2.1	+18 41	8.7	8.7	Ao	3	..	37446i
38	1312	1.8	-22 38	9.3	9.2	A5	2	..	17395b	88	1100	2.1	+18 25	8.1	8.9	G5	4	0.3	37568i
39	2709	1.8	-26 19	8.9	9.0	Ao	5	..	42904b	89	1032	2.1	+11 1	7.5	8.5	Ko	3	..	37568i
40	2759	1.8	-29 2	9.5	10.4	Ma	1	..	42904b	90	1015	2.1	+10 28	6.86	7.86	Ko	5	..	37568i
41	2724	1.8	-33 30	7.26	7.2	B9	7	..	10682b	91	1193	2.1	+8 17	7.9	7.9	B9	5	..	38171i
42	2302	1.8	-45 5	5.82	7.0	F5	..	0.7	56,122	92	1138	2.1	+7 56	8.5	8.5	Ao	3	..	38171i
43	2175	1.8	-47 28	8.0	8.1	F8	8	..	15220b	93	1125	2.1	+6 27	8.1	8.1	Ao	4	..	38171i
44	842	1.8	-52 47	8.7	9.5	Fo	4	..	20547b	94	1412	2.1	-6 11	6.58	6.72	A5	4	..	37625i
45	1004	1.8	-53 46	9.5	10.1	Go	1	..	20547b	95	1377	2.1	-10 15	9.1	9.1	B9	6	..	20581b
46	571	1.8	-59 36	8.5	9.4	K2	5	..	15147b	96	1383	2.1	-11 57	9.1	9.1	Ao	9	..	20581b
47	541	1.8	-60 38	8.4	8.8	F2	5	..	15147b	97	1354	2.1	-13 25	8.9	8.9	Ao	5	..	20581b
48	569	1.8	-61 11	8.4	9.7	F8	2	..	15147b	98	1353	2.1	-13 44	9.1	9.2	A2	4	..	20581b
49	429	1.9	+68 2	9.0	9.4	F5	2	..	38169i	99	1269	2.1	-15 7	8.75	9.75	Ko	3	5.3	20581b
50	1203	1.9	+31 13	8.0	8.5	F8	3	..	37377i	100	1356	2.1	-16 53	8.1	9.2	K2	5	..	12632b

THE HENRY DRAPER CATALOGUE.

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6^h 2^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2181	m. 2.1	° 46 49	9.4	10.2	K2	2	..	15220b	51	1127	m. 2.4	° 21 48	9.8	10.8	Ko	1	..	37446i
2	546	2.1	-67 52	9.3	10.3	K	1	..	18485b	52	1196	2.4	+ 8 58	8.3	9.3	Ko	2	..	38171i
3	361	2.1	-75 24	10.1	10.6	F8	2	..	20652b	53	1197	2.4	+ 8 15	8.9	9.9	Ko	1	..	38171i
4	202	2.2	+80 23	7.42	7.84	F5	5	0,8	37343i	54	1101	2.4	+ 5 35	8.7	8.8	A2	3	..	38411b
5	1275	2.2	+50 10	8.6	9.4	G5	1	E	37419i	55	1128	2.4	+ 4 25	8.5	8.5	Ao	2	..	38171i
6	1493	2.2	+42 25	8.6	8.6	Ao	3	..	37397i	56	1301	2.4	- 3 59	9.1	9.4	F2	5	3,4	20894b
7	1367	2.2	+36 41	7.7	8.9	K5	3	..	38126i	57	1368	2.4	- 4 34	9.1	10.2	K2	2	2,1	20894b
8	1128	2.2	+ 3 7	7.7	7.7	Ao	5	..	38171i	58	1503	2.4	- 5 34	8.9	9.2	F2	5	..	20894b
9	1137	2.2	+ 2 9	8.5	8.6	A5	3	..	38205i	59	1379	2.4	-10 36	10.2	10.8	Go	1	..	20581b
10	1177	2.2	- 0 53	8.8	8.8	Ao	5	0,2	12682b	60	1388	2.4	-11 33	10.2	10.3	A5	2	..	20581b
11	1365	2.2	- 4 35	9.7	10.5	G5	1	..	20894b	61	1380	2.4	-12 41	9.7	9.7	Ao	4	..	20581b
12	1285	2.2	- 7 53	9.5	9.6	A3	2	..	20546b	62	1355	2.4	-13 40	9.7	9.7	Ao	3	..	20581b
13	1333	2.2	- 9 43	8.4	9.4	Ko	6	..	20581b	63	2730	2.4	-33 13	6.76	7.1	F5	8	..	42904b
14	1386	2.2	-11 10	6.38	6.26	B5	3	..	2345b	64	959	2.4	-54 22	7.4	8.3	F5	7	..	20547b
15	1378	2.2	-12 34	9.9	10.0	A3	2	..	20581b	65	936	2.4	-55 56	8.9	9.2	Ao	3	..	18484b
16	1359	2.2	-16 15	8.4	9.2	G5	5	..	12632b	66	1349	2.5	+48 59	8.4	8.4	Ao	2	..	37428i
17	1358	2.2	-16 26	9.1	9.7	G	2	..	12632b	67	1371	2.5	+41 16	7.89	8.96	K2	3	..	37397i
18	1357	2.2	-16 30	6.68	7.46	G5	8	5,3	12632b	68	1426	2.5	+37 48	9.1	9.1	Ao	1	..	37397i
19	2766	2.2	-32 3	8.7	9.2	F5	5	..	42904b	69	1130	2.5	+25 40	8.7	8.7	B9	2	..	37440i
20	2728	2.2	-33 24	9.4	9.8	G5	2	..	44364b	70	1187	2.5	+22 38	var.	var.	G5	3	R	37446i
21	2244	2.2	-40 3	7.80	8.9	K2	5	..	20649b	71	1141	2.5	+ 7 5	9.3	9.3	Ao	2	..	38411b
22	2328	2.2	-42 27	8.3	8.3	Fo	7	..	20649b	72	1102	2.5	+ 5 37	9.3	9.4	A5	2	..	38411b
23	2327	2.2	-42 55	8.5	9.5	Ko	2	..	20649b	73	1116	2.5	- 1 13	8.7	9.5	G5	5	0,1	12682b
24	2124	2.2	-48 27	6.44	7.1	G5	9	..	20547b	74	1506	2.5	- 5 22	8.9	8.9	Ao	6	1,6	12754b
25	362	2.2	-75 10	8.43	9.5	Ko	6	0,3	20652b	75	1389	2.5	-11 3	9.5	9.5	Ao	4	..	20581b
26	366	2.2	-76 14	9.8	10.9	K2	1	..	20652b	76	1357	2.5	-13 12	9.1	9.6	F8	3	..	20581b
27	862	2.3	+61 32	9.2	9.2	Ao	1	..	38154i	77	1355	2.5	-19 56	8.08	8.0	Ao	5	..	12466b
28	949	2.3	+59 57	8.11	9.18	K2	3	0,2	37408i	78	1314	2.5	-22 24	8.1	9.2	Ao	4	..	12466b
29	1128	2.3	+25 59	8.2	9.2	Ko	3	..	37446i	79	3432	2.5	-23 31	8.0	8.6	Ko	5	..	12466b
30	1216	2.3	+23 23	8.6	9.4	G5	2	..	37446i	80	2929	2.5	-25 53	8.3	9.0	F8	4	..	42904b
31	1185	2.3	+22 14	9.0	8.8	B3	1	..	37446i	81	2713	2.5	-28 6	8.7	9.5	Ko	3	..	42904b
32	1157	2.3	+14 21	7.9	8.9	Ko	2	..	37568i	82	2993	2.5	-31 1	10.2	9.8	F2	1	..	42904b
33	1119	2.3	+13 9	9.3	9.4	A2	2	..	37568i	83	2995	2.5	-31 39	8.7	8.4	B9	5	..	42904b
34	1028	2.3	+12 40	8.3	9.1	G5	3	..	37568i	84	2044	2.5	-49 35	9.0	9.7	Ko	2	..	20547b
35	1114	2.3	- 1 56	8.12	8.12	Ao	7	0,3	12682b	85	211	2.5	-78 47	10.2	11.2	Ko	2	..	20652b
36	1366	2.3	- 4 32	10.2	10.6	F5	1	..	20894b	86	819	2.6	+63 0	8.9	10.0	K2	1	..	38154i
37	1323	2.3	- 8 14	9.1	10.1	Ko	4	..	20546b	87	1372	2.6	+41 34	8.9	9.0	A3	1	..	37397i
38	1387	2.3	-11 38	9.1	9.7	Go	2	..	20581b	88	1533	2.6	+39 11	8.0	8.1	A2	4	..	37429i
39	1379	2.3	-12 3	7.9	8.9	Ko	8	..	20581b	89	1207	2.6	+31 17	7.46	7.52	A2	5	..	37377i
40	1313	2.3	-22 8	8.1	7.7	B9	7	..	12466b	90	1131	2.6	+25 40	7.6	9.0	Ma	2	..	37440i
41	3431	2.3	-23 6	5.50	5.56	A2	..	2,10	56,81	91	1136	2.6	+17 27	8.9	9.7	G5	2	..	37568i
42	2736	2.3	-27 54	9.2	9.6	Ko	1	..	42904b	92	1011	2.6	+16 5	8.4	8.7	F2	3	..	37579i
43	2769	2.3	-29 45	5.72	5.72	Ao	..	..	56,122	93	1036	2.6	+11 16	8.81	8.81	Ao	2	..	37568i
44	2729	2.3	-33 22	10.4	9.5	Ao	2	..	44364b	94	1223	2.6	+ 1 41	8.9	9.2	Fo	3	..	15138b
45	2245	2.3	-40 38	9.4	9.7	F5	4	..	20649b	95	1302	2.6	- 3 35	8.3	8.3	B9	4	..	12682b
46	480	2.3	-70 1	8.44	8.8	A3	8	0,7 R	15767b	96	1369	2.6	- 4 7	9.1	9.4	Fo	5	0,4	20894b
47	1466	2.4	+43 10	7.02	7.02	Ao	5	..	37428i	97	3436	2.6	-23 5	7.13	8.0	Ao	7	2,4	12466b
48	1529	2.4	+39 43	9.0	9.1	A2	1	..	37397i	98	3699	2.6	-24 55	7.06	7.7	Fo	8	..	42904b
49	1272	2.4	+34 55	7.82	9.17	Mb	3	..	38126i	99	2715	2.6	-28 27	8.1	9.2	G5	3	..	42904b
50	1123	2.4	+29 52	8.61	8.95	F2	3	..	37377i	100	2769	2.6	-32 32	9.4	9.8	Ko	2	..	42904b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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6^h 2^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2596	2.6	-37 57	10.7	11.6	Ko	1	..	20527b	51	1336	2.9	-14 0	9.9	10.5	Go	2	..	20581b
2	2372	2.6	-39 39	8.7	9.4	Ko	3	..	20649b	52	1272	2.9	-15 15	9.5	10.7	K5	2	..	20581b
3	2187	2.6	-46 56	7.6	8.5	Ko	6	..	15220b	53	1360	2.9	-17 48	8.5	9.3	G5	4	..	12632b
4	519	2.6	-63 45	8.4	9.4	Ko	4	..	15147b	54	2651	2.9	-34 58	10.7	11.2	Ko	1	..	20527b
5	1391	2.7	+38 19	7.52	7.52	Ao	5	0.4	38126i	55	2598	2.9	-37 42	10.4	10.5	A3	1	..	20527b
6	1208	2.7	+31 46	8.8	9.2	F5	2	..	37377i	56	2249	2.9	-40 11	10.2	9.4	F8	3	..	20649b
7	1219	2.7	+23 0	8.8	10.0	K5	2	..	37446i	57	2337	2.9	-42 46	8.8	9.1	G5	4	..	20649b
8	1223	2.7	+19 29	8.8	9.1	Fo	3	..	37446i	58	1006	2.9	-53 12	8.1	9.2	Ao	5	..	20547b
9	1160	2.7	+14 1	8.8	8.7	B5	6	R	37568i	59	937	2.9	-55 56	8.7	9.8	G5	1	..	18484b
10	1198	2.7	+ 8 24	8.4	8.5	A3	4	..	38171i	60	521	2.9	-63 29	9.9	10.0	A3	2	..	15147b
11	1129	2.7	+ 4 0	8.9	9.0	A2	4	..	38411b	61	205	2.9	-79 31	9.8	10.9	K2	3	..	20652b
12	1294	2.7	+ 0 21	9.9	9.9	Ao	2	2.2	12682b	62	306	3.0	+72 51	8.4	9.4	Ko	2	..	38169i
13	1507	2.7	- 5 24	9.9	10.0	A2	2	..	20894b	63	945	3.0	+57 3	8.1	8.6	F8	4	..	37407i
14	1382	2.7	-12 12	9.1	10.1	Ko	4	..	20581b	64	993	3.0	+54 51	9.31	9.39	A3	2	..	37408i
15	1359	2.7	-13 20	9.7	10.1	F5	1	..	20581b	65	994	3.0	+53 38	8.0	9.0	Ko	4	..	37408i
16	1333	2.7	-14 0	10.6	11.2	Go	2	..	20581b	66	1375	3.0	+41 5	8.6	9.4	G5	1	..	37397i
17	1334	2.7	-14 28	10.2	11.2	Ko	2	..	20581b	67	1077	3.0	+15 12	8.5	9.5	Ko	2	..	37579i
18	1356	2.7	-19 4	8.5	9.0	Ko	1	..	12466b	68	1292	3.0	- 7 20	9.1	9.7	Go	3	..	20546b
19	1354	2.7	-21 14	9.3	9.8	Go	2	..	17395b	69	1324	3.0	- 8 38	8.5	8.5	Ao	8	..	20581b
20	1315	2.7	-22 5	9.1	9.8	K5	1	..	17395b	70	1382	3.0	-10 39	9.7	10.3	Go	1	..	20581b
21	2770	2.7	-33 0	8.4	8.6	Ao	4	..	42904b	71	1384	3.0	-12 1	8.5	9.7	K5	3	..	20581b
22	2427	2.7	-44 5	9.0	9.9	Ko	2	E	20555b	72	1337	3.0	-14 5	10.3	10.7	F5	2	..	20581b
23	571	2.7	-62 11	9.6	10.6	Ko	1	..	15147b	73	1356	3.0	-21 31	8.5	8.9	Fo	4	..	12466b
24	520	2.7	-63 21	8.1	9.1	Ko	5	..	15147b	74	1319	3.0	-22 15	9.1	9.8	Go	3	R	17395b
25	481	2.7	-70 6	8.5	9.7	K5	3	0.3	18485b	75	3443	3.0	-23 30	9.2	9.2	Ko	2	..	12466b
26	318	2.8	+73 36	9.2	9.3	A2	2	..	37343i	76	2721	3.0	-28 31	8.0	9.2	Ko	2	..	42904b
27	517	2.8	+65 44	5.39	6.39	Ko	10	..	37545i	77	3003	3.0	-31 24	7.38	8.6	G5	6	..	42904b
28	1258	2.8	+47 43	8.0	9.4	Mb	2	..	37428i	78	3004	3.0	-31 59	10.2	9.2	Ao	4	..	42904b
29	1105	2.8	+46 46	7.18	8.18	Ko	3	..	37428i	79	578	3.0	-59 49	8.4	8.8	F5	6	..	15147b
30	1373	2.8	+41 22	8.9	8.9	A	1	..	37397i	80	863	3.1	+61 30	9.2	10.2	Ko	1	..	38154i
31	1129	2.8	+ 6 52	9.6	9.7	A5	1	..	38411b	81	1428	3.1	+37 35	8.0	8.5	F8	4	3.2	38126i
32	1360	2.8	-13 22	9.5	9.5	B9	4	..	20581b	82	1429	3.1	+37 7	8.8	8.8	Ao	2	..	38126i
33	1353	2.8	-21 48	6.12	7.7	Mb	..	0.8	56.81	83	1199	3.1	+ 8 40	8.9	8.9	Ao	3	..	38411b
34	2774	2.8	-29 36	9.2	9.2	A2	5	..	42904b	84	1105	3.1	+ 5 0	8.91	8.97	A2	3	..	38171i
35	2649	2.8	-34 43	8.4	9.0	Fo	6	..	20527b	85	1135	3.1	+ 3 42	8.9	9.0	A2	2	..	38171i
36	2418	2.8	-38 57	9.1	10.0	K2	2	..	20527b	86	1133	3.1	+ 3 25	7.9	7.9	Ao	6	..	38171i
37	2236	2.8	-43 56	7.3	7.3	A5	3	..	42923b	87	1226	3.1	+ 1 7	8.59	9.59	Ko	2	0.1	15138b
38	1427	2.9	+37 13	8.4	8.4	Ao	3	..	38126b	88	1338	3.1	- 9 26	8.1	8.4	Fo	4	..	20581b
39	1133	2.9	+25 31	8.1	8.1	Ao	4	..	37446i	89	1361	3.1	-13 12	9.5	9.5	Ao	3	..	20581b
40	1123	2.9	+24 22	8.6	8.6	B8	4	..	37446i	90	1357	3.1	-21 11	8.3	8.6	F2	4	..	12466b
41	1221	2.9	+23 13	10.0	10.0	Ao	2	..	37446i	91	1320	3.1	-22 34	8.5	7.4	Ao	4	0.8	8904b
42	1139	2.9	+17 25	8.4	9.0	Go	2	..	37579i	92	3007	3.1	-31 30	9.5	9.8	F8	2	..	42904b
43	1124	2.9	+13 59	7.4	7.2	B2	9	..	37568i	93	574	3.1	-62 19	8.9	9.2	Fo	3	..	15147b
44	1145	2.9	+ 7 8	8.7	9.5	G5	1	..	38171i	94	1006	3.2	+27 13	8.0	9.0	Ko	3	..	37440i
45	1131	2.9	+ 4 59	8.61	8.59	B9	3	..	38171i	95	1127	3.2	+24 38	10.0	10.0	A	1	..	37440i
46	1132	2.9	+ 4 56	8.41	8.39	B9	4	..	38171i	96	1126	3.2	+24 27	8.2	8.8	Go	4	..	37440i
47	1130	2.9	+ 4 6	8.9	8.9	Ao	3	..	38411b	97	1079	3.2	+15 44	8.5	8.3	B	2	R	37579i
48	1131	2.9	+ 3 18	8.3	8.3	Ao	3	..	38171i	98	1107	3.2	+ 9 39	8.2	8.2	B8	5	..	38171i
49	1295	2.9	+ 0 55	9.6	9.6	Ao	1	..	15138b	99	1106	3.2	+ 5 48	8.3	8.4	A2	4	..	38171i
50	1291	2.9	- 7 9	8.5	8.5	Ao	7	..	20546b	100	1227	3.2	+ 1 36	8.8	9.6	G5	1	..	38205i

THE HENRY DRAPER CATALOGUE.

42000

6^h 3^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1120	3.2	- 1 24	8.2	9.0	G5	4	5,1	12682b	51	1420	3.5	- 6 31	8.9	8.7	B3	3	..	20894b
2	1489	3.2	- 2 1	10.2	10.2	A	2	..	12682b	52	1389	3.5	- 10 26	8.5	8.6	A3	5	..	20581b
3	1513	3.2	- 5 52	9.5	10.1	G	1	..	20894b	53	2734	3.5	- 26 15	10.4	9.5	A5	2	..	42904b
4	1417	3.2	- 6 12	9.1	9.1	B9	3	..	20546b	54	2655	3.5	- 34 18	5.93	5.81	B5	..	..	28,198
5	1368	3.2	- 16 52	9.1	9.2	A2	2	..	12632b	55	2656	3.5	- 36 44	10.4	10.4	A5	2	..	20527b
6	2745	3.2	- 27 15	9.7	9.2	A0	3	..	42904b	56	2424	3.5	- 38 36	8.7	10.3	K2	1	..	20527b
7	2780	3.2	- 29 6	8.3	9.5	K0	3	..	42904b	57	2384	3.5	- 39 8	10.4	9.5	F8	1	..	20527b
8	2052	3.2	- 49 57	10.2	9.9	A	2	..	15220b	58	2227	3.5	- 41 12	6.94	6.7	A0	5	0,10	42923b
9	1744	3.2	- 51 18	9.4	9.4	K2	2	..	20547b	59	1012	3.5	- 53 7	8.9	10.1	K0	2	..	20547b
10	615	3.2	- 58 12	8.9	9.7	K0	2	..	18484b	60	214	3.6	+ 81 47	9.2	10.0	G5	1	..	38330i
11	228	3.3	+ 76 42	8.6	10.0	Ma	1	..	37343i	61	393	3.6	+ 70 42	7.8	8.6	G5	2	..	37343i
12	1279	3.3	+ 34 10	8.6	9.6	K0	2	..	38126i	62	417	3.6	+ 67 51	8.1	9.2	K2	3	..	38169i
13	1128	3.3	+ 24 35	8.6	8.6	A0	3	..	37440i	63	1463	3.6	+ 49 2	8.2	8.2	A0	3	..	38935i
14	1201	3.3	+ 8 39	9.1	9.1	B9	3	..	38411i	64	1498	3.6	+ 42 49	9.2	9.2	A0	1	..	37397i
15	1148	3.3	+ 7 14	8.5	8.5	A0	4	..	38171i	65	1506	3.6	+ 40 36	7.7	8.2	F8	3	..	37429i
16	1121	3.3	- 1 56	8.01	8.01	A0	7	0,3	12682b	66	1133	3.6	+ 24 10	10.0	10.1	A2	2	..	37440i
17	1490	3.3	- 2 35	9.1	9.1	A0	4	..	12682b	67	1235	3.6	+ 19 15	8.3	8.9	Go	3	5,3	37568i
18	1304	3.3	- 3 2	9.1	9.2	A5	2	..	12754b	68	1144	3.6	+ 17 52	8.2	8.8	Go	3	2,3	37568i
19	1341	3.3	- 14 14	8.5	9.5	K0	6	..	20581b	69	1143	3.6	+ 17 12	8.3	8.3	A0	3	0,2	37568i
20	1274	3.3	- 15 11	9.1	9.5	F5	4	0,3	20581b	70	1036	3.6	+ 12 59	8.3	8.6	F2	3	..	37568i
21	1362	3.3	- 17 36	9.1	10.2	K2	2	..	12630b	71	1044	3.6	+ 11 41	7.8	8.6	G5	2	..	37579i
22	2943	3.3	- 25 52	9.2	9.8	G5	1	..	42904b	72	1204	3.6	+ 8 56	8.5	8.5	A0	3	..	38171i
23	2747	3.3	- 27 7	8.3	9.8	K2	2	..	42904b	73	1516	3.6	- 5 23	9.1	9.7	G	3	..	20894b
24	2309	3.3	- 45 48	7.5	8.1	F8	3	..	42923b	74	1275	3.6	- 15 52	7.7	8.1	F5	8	..	12632b
25	961	3.3	- 54 24	7.0	8.3	K0	8	..	20547b	75	2736	3.6	- 26 36	8.7	9.2	A5	3	..	42904b
26	1009	3.3	- 56 13	6.59	7.8	K2	8	..	18484b	76	2258	3.6	- 40 5	9.50	10.0	G5	2	..	20649b
27	580	3.3	- 59 47	9.1	10.1	K0	2	..	15147b	77	2229	3.6	- 41 46	9.0	10.6	K2	2	..	20649b
28	549	3.3	- 60 35	8.6	9.4	K0	3	..	15147b	78	2343	3.6	- 42 17	6.25	6.7	A2	6	R	42923b
29	549	3.3	- 67 18	7.6	7.7	A2	5	0,4	9062b	79	616	3.6	- 58 49	8.5	9.1	G5	4	..	18484b
30	483	3.3	- 70 40	9.6	10.8	K5	2	..	15167b	80	410	3.6	- 71 2	9.9	10.0	A2	4	..	15167b
31	821	3.4	+ 62 47	9.0	9.0	A0	3	..	38154i	81	412	3.6	- 71 57	9.9	10.9	K0	1	..	15167b
32	1260	3.4	+ 47 32	7.7	7.8	A3	3	..	37428i	82	443	3.6	- 72 8	8.2	9.4	K5	4	0,5	24561b
33	1128	3.4	+ 29 16	7.8	8.2	F5	4	..	37377i	83	1041	3.7	+ 52 40	6.27	6.33	A2	9	..	37408i
34	1028	3.4	+ 28 25	8.4	8.8	F5	3	..	37377i	84	1261	3.7	+ 47 55	6.84	6.90	A2	7	..	37428i
35	1202	3.4	+ 8 41	6.45	6.43	B9	8	..	38171i	85	1260	3.7	+ 33 18	9.0	9.6	Go	2	..	38126i
36	1136	3.4	+ 3 11	8.8	9.9	K2	1	..	15138b	86	1135	3.7	+ 24 14	8.5	8.6	A2	5	..	37446i
37	1514	3.4	- 5 43	10.2	10.3	A2	2	..	20894b	87	1226	3.7	+ 23 8	5.76	5.54	Br	9	..	37446i
38	1419	3.4	- 6 53	9.0	9.4	F5	6	..	20546b	88	1284	3.7	+ 20 31	7.40	..	Oes	5	..	37446i
39	1295	3.4	- 7 21	9.7	10.2	F8	2	..	20894b	89	1150	3.7	+ 7 32	6.69	7.25	Go	7	..	38171i
40	1296	3.4	- 7 35	10.2	10.2	A0	1	..	20894b	90	1151	3.7	+ 7 4	8.3	8.3	A0	4	..	38171i
41	1386	3.4	- 10 33	7.7	7.7	A0	7	..	20581b	91	1133	3.7	+ 6 46	8.7	8.7	A0	2	..	38171i
42	1361	3.4	- 19 9	5.51	7.2	Ma	4	0,8	42141b	92	1140	3.7	+ 2 31	7.7	7.7	A0	4	..	38205i
43	2944	3.4	- 25 34	8.9	9.8	K0	1	..	42904b	93	1297	3.7	+ 0 48	10.3	10.3	A0	1	..	15138b
44	3008	3.4	- 31 53	7.8	8.1	F5	6	..	42904b	94	1494	3.7	- 2 28	8.7	9.5	G5	2	..	12682b
45	2777	3.4	- 32 30	7.60	9.2	K0	5	..	42904b	95	1392	3.7	- 11 28	9.1	9.7	Go	5	..	20581b
46	1010	3.4	- 53 48	9.4	9.5	A3	4	..	20547b	96	1277	3.7	- 15 25	9.1	9.1	A0	5	0,4	20581b
47	947	3.4	- 57 50	8.8	9.5	A0	4	..	18484b	97	1364	3.7	- 19 46	8.3	8.3	F0	4	..	12466b
48	1378	3.5	+ 41 10	8.7	8.8	A2	2	..	37397i	98	1322	3.7	- 22 27	9.1	8.9	A0	4	..	12466b
49	1198	3.5	+ 22 13	6.04	7.11	K2	6	..	37446i	99	2849	3.7	- 30 37	7.9	9.8	K5	3	..	42904b
50	1515	3.5	- 5 19	8.5	8.4	B5	7	..	20894b	100	2658	3.7	- 36 32	9.6	10.4	F2	1	..	20527b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

42100

6^h 3^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	938	m. 3.7	° 55 6	9.3	9.8	F8	1	..	18484b	51	1384	m. 4.1	° 41 57	7.8	8.8	Ko	3	..	37397i
2	563	3.7	-69 25	9.7	9.8	A2	5	0,3	15167b	52	1508	4.1	+40 33	7.9	7.9	Ao	5	..	37397i
3	168	3.7	-80 6	9.08	10.0	G5	3	..	20557b	53	1434	4.1	+37 43	8.6	8.6	B9	3	..	38126i
4	345	3.8	+71 25	8.9	9.2	F	1	..	37343i	54	1283	4.1	+34 16	7.8	7.8	Ao	6	..	38126i
5	997	3.8	+53 50	8.2	9.0	G5	3	..	37408i	55	1263	4.1	+33 28	9.1	9.1	Ao	1	..	38126i
6	1133	3.8	+30 34	7.8	8.6	G5	1	..	37440i	56	1208	4.1	+32 4	7.52	7.52	Ao	6	..	37377i
7	1132	3.8	+30 3	9.21	9.21	Ao	1	..	37440i	57	1220	4.1	+31 59	7.80	8.80	K	3	..	38126i
8	1138	3.8	+24 38	9.4	9.4	A	1	..	37440i	58	1137	4.1	+21 15	8.8	9.1	Fo	3	..	37446i
9	1135	3.8	+6 16	9.3	9.4	A3	2	..	38411b	59	1237	4.1	+19 42	8.1	8.4	Fo	4	2,3	37446i
10	1139	3.8	+3 49	9.3	9.4	A2	3	..	38411b	60	1145	4.1	+17 58	8.3	9.1	G5	2	..	37568i
11	1139	3.8	+2 31	5.58	5.58	Ao	7	..	38205i	61	1168	4.1	+14 8	8.9	9.0	A2	3	..	37568i
12	1299	3.8	+0 10	8.88	9.44	Go	2	..	12682b	62	1135	4.1	+13 47	8.1	8.1	Ao	5	..	37579i
13	1125	3.8	-1 21	9.6	9.6	Ao	2	..	12682b	63	2955	4.1	-25 24	7.48	8.0	A2	6	2,7	12664b
14	1517	3.8	-5 18	7.9	8.9	Ko	5	..	20894b	64	2663	4.1	-34 28	8.4	8.8	Ko	5	..	20527b
15	1422	3.8	-6 37	9.1	9.5	F5	3	..	20546b	65	2665	4.1	-34 38	7.30	8.2	Ko	7	..	20527b
16	1393	3.8	-11 8	6.77	6.83	A2	2	0,10	2345b	66	2660	4.1	-36 18	7.69	7.8	Ao	8	..	20527b
17	1363	3.8	-13 52	10.2	10.2	Ao	2	..	20581b	67	2609	4.1	-37 14	5.13	5.11	B9	..	R	56,122
18	3460	3.8	-23 36	9.2	9.6	K2	1	..	17395b	68	2317	4.1	-45 5	6.36	7.8	K2	3	..	42923b
19	2389	3.8	-39 14	9.4	9.1	F2	4	..	20527b	69	2061	4.1	-49 13	7.14	7.2	A5	8	..	20547b
20	966	3.8	-54 30	8.4	9.5	K2	4	..	20547b	70	852	4.1	-52 18	8.1	8.2	F2	7	..	20547b
21	582	3.8	-59 8	8.3	10.3	K5	2	..	18484b	71	138	4.1	-82 51	9.4	10.2	G5	2	..	20557b
22	577	3.8	-62 7	9.5	10.1	Go	3	..	15147b	72	198	4.2	+79 49	8.09	8.87	G5	3	5,2	37558i
23	230	3.8	-77 36	9.5	10.6	K2	3	..	20652b	73	1383	4.2	+44 10	7.52	7.58	A2	5	..	37428i
24	206	3.8	-79 23	10.2	11.4	K5	2	..	20652b	74	1264	4.2	+33 39	9.1	9.1	Ao	1	..	38126i
25	85	3.8	-84 55	8.2	8.3	A5	7	..	15145b	75	1265	4.2	+33 1	8.2	8.5	Fo	2	..	38126i
26	1352	3.9	+48 44	6.82	6.82	Ao	8	R	37428i	76	1138	4.2	+30 59	8.1	8.6	F8	2	..	37377i
27	1381	3.9	+48 44	6.09	6.09	Ao	8	R	37428i	77	1133	4.2	+29 26	8.6	8.6	Ao	2	..	37377i
28	1134	3.9	+44 58	7.52	8.30	G5	3	..	37428i	78	1021	4.2	+16 47	8.9	8.9	Ao	2	..	37568i
29	1134	3.9	+30 27	8.0	8.8	G5	2	..	37440i	79	1084	4.2	+15 22	8.7	8.7	Ao	3	..	37568i
30	1140	3.9	+3 55	8.8	9.2	F5	2	..	38411b	80	1170	4.2	+14 52	7.29	7.27	B9	8	..	37568i
31	1495	3.9	-2 2	7.22	8.00	G5	4	..	37595i	81	1116	4.2	+5 41	8.3	8.8	F8	4	..	38411b
32	1424	3.9	-6 48	6.64	7.42	G5	8	..	20894b	82	1117	4.2	+5 41	8.3	8.9	Go	2	5,1	38411b
33	1299	3.9	-7 55	6.65	6.71	A2	3	2,9	2345b	83	1232	4.2	+1 29	10.3	10.3	Ao	2	..	15138b
34	1329	3.9	-8 30	9.7	9.7	Ao	2	..	20546b	84	1343	4.2	-9 38	7.9	8.0	A2	8	..	20581b
35	1365	3.9	-19 25	8.3	7.8	Ao	5	..	12466b	85	1344	4.2	-14 57	10.6	10.7	A5	3	..	20581b
36	2707	3.9	-35 13	7.85	7.7	Ao	9	..	20527b	86	1366	4.2	-19 5	9.3	8.9	Ao	2	..	12630b
37	2605	3.9	-37 1	7.6	9.0	K5	6	..	20527b	87	2729	4.2	-28 23	8.5	8.4	A3	5	..	42904b
38	2607	3.9	-37 11	7.5	8.2	G5	8	..	20527b	88	2787	4.2	-32 55	8.0	9.5	G5	3	..	44364b
39	229	3.9	-77 16	9.5	10.5	Ko	3	..	15162b	89	2264	4.2	-40 48	9.6	10.0	F8	2	..	20649b
40	950	4.0	+59 54	8.81	9.99	K5	1	R	38239i	90	2202	4.2	-46 11	6.84	6.8	F2	4	..	42923b
41	1383	4.0	+41 15	7.60	7.58	B9	4	..	37429i	91	2143	4.2	-48 40	8.6	8.5	A5	3	..	20547b
42	1207	4.0	+8 19	9.6	9.6	Ao	1	..	38171i	92	1017	4.2	-53 4	8.7	10.2	Ko	2	..	20547b
43	1136	4.0	+6 17	8.2	8.2	Ao	7	..	38171i	93	952	4.2	-57 58	8.4	9.5	Ko	4	..	18484b
44	1142	4.0	+3 42	8.8	8.8	Ao	2	..	38411b	94	394	4.3	+70 1	8.09	9.09	Ko	4	..	38169i
45	1300	4.0	+0 42	10.3	10.3	Ao	1	..	15138b	95	1474	4.3	+43 50	7.28	8.35	K2	3	..	37428i
46	1391	4.0	-10 58	9.1	9.4	Fo	1	..	20581b	96	1475	4.3	+43 11	7.06	7.84	G5	3	..	37428i
47	1371	4.0	-16 52	9.5	9.5	Ao	3	..	12632b	97	1385	4.3	+41 27	8.2	8.2	Ao	4	..	37397i
48	2232	4.0	-41 32	10.9	10.2	Go	1	..	20649b	98	1240	4.3	+19 8	8.7	8.7	B9	3	1,2	37568i
49	573	4.0	-61 16	8.6	9.7	K2	3	..	15147b	99	1147	4.3	+17 44	8.1	8.1	Ao	4	2,3	37568i
50	..	4.0	-79 14	..	..	Ko	2	..	20652b	100	1023	4.3	+16 47	8.5	8.9	F5	2	..	37568i

THE HENRY DRAPER CATALOGUE.

42200

6^h 4^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1022	4.3	+16 28	8.5	8.6	A2	3	..	37568i	51	1464	4.6	+49 58	8.67	8.95	F	1	E	37419i
2	1136	4.3	+13 52	8.9	8.9	A0	1	..	37579i	52	1027	4.6	+10 30	8.7	9.9	K5	1	..	38411b
3	1141	4.3	+4 44	7.80	7.75	B8	5	..	38171i	53	1114	4.6	+9 39	8.5	9.7	K5	1	..	38411b
4	1308	4.3	-3 46	7.9	7.8	B5	5	..	12682b	54	1155	4.6	+7 39	8.2	8.2	B9	5	..	38171i
5	1332	4.3	-8 17	6.83	7.83	K0	8	..	20546b	55	1120	4.6	+5 44	8.2	9.2	K0	2	..	38171i
6	1331	4.3	-8 23	9.1	9.2	A2	4	..	20894b	56	1144	4.6	+2 54	6.72	7.72	K0	4	..	38171i
7	1391	4.3	-12 37	8.5	8.5	A0	5	..	20581b	57	1235	4.6	+1 0	7.54	7.52	B9	6	0.8	38205i
8	1365	4.3	-13 4	9.1	10.1	K0	3	..	20581b	58	1310	4.6	-3 23	9.1	9.7	Go	2	..	12682b
9	3471	4.3	-24 0	9.7	9.0	A	2	..	12466b	59	1521	4.6	-5 3	8.35	8.18	B3	5	..	20894b
10	2233	4.3	-41 34	8.5	8.2	B9	7	..	20649b	60	1522	4.6	-5 41	8.9	9.9	K0	1	..	20894b
11	940	4.3	-55 57	8.0	8.9	K0	4	..	18484b	61	1431	4.6	-6 18	9.1	9.0	B5	4	..	20894b
12	..	4.4	+50 15	var.	var.	Md	..	R	M	62	1393	4.6	-12 8	10.2	10.5	Fo	1	..	20581b
13	1502	4.4	+42 12	7.9	7.9	B9	4	..	37429i	63	1280	4.6	-15 41	7.9	7.9	A0	7	..	12632b
14	1116	4.4	+26 28	8.8	8.9	A2	3	..	37440i	64	3478	4.6	-23 46	9.3	8.6	G5	3	..	12466b
15	1143	4.4	+24 34	9.5	9.5	B9	1	..	37440i	65	3735	4.6	-24 33	8.9	9.8	K0	2	5.1	45993b
16	1232	4.4	+23 1	6.68	6.66	B9	6	..	37446i	66	2270	4.6	-40 43	10.7	10.2	G	1	..	20649b
17	1210	4.4	+8 46	8.3	9.5	K5	2	..	38171i	67	856	4.6	-52 52	8.2	8.8	K2	4	..	20547b
18	1377	4.4	-4 4	9.1	9.1	A0	3	..	20894b	68	232	4.6	-77 28	9.6	10.6	K0	2	..	20652b
19	1520	4.4	-5 19	8.5	8.9	F5	7	..	20894b	69	212	4.6	-78 16	9.9	10.9	K0	3	..	20652b
20	1393	4.4	-10 31	9.1	9.2	A3	4	..	20581b	70	165	4.6	-81 57	9.5	10.3	G5	3	..	20557b
21	3728	4.4	-24 18	8.5	9.8	K2	2	3.1	42904b	71	997	4.7	+54 0	9.0	9.1	A3	3	..	37408i
22	2748	4.4	-26 26	9.3	10.1	A3	2	..	42904b	72	1117	4.7	+26 3	var.	var.	Na	1	R	37440i
23	2790	4.4	-32 45	9.0	9.2	F8	3	..	44364b	73	1151	4.7	+17 43	7.9	8.9	K0	1	..	37579i
24	2747	4.4	-33 34	10.0	9.2	G5	3	0.2	44364b	74	1090	4.7	+15 6	8.44	9.44	K0	2	..	37579i
25	2613	4.4	-37 56	9.4	10.8	K5	2	..	20527b	75	1139	4.7	+13 51	7.5	7.8	F2	6	..	37568i
26	1749	4.4	-51 4	9.8	9.4	F8	2	..	20547b	76	1115	4.7	+9 10	8.3	9.3	K0	2	..	38171i
27	1751	4.4	-51 10	9.8	9.4	F5	3	..	20547b	77	1144	4.7	+3 19	9.3	9.3	A0	3	..	15138b
28	550	4.4	-60 5	9.11	9.7	K0	3	..	15147b	78	1523	4.7	-5 41	6.19	6.47	Fo	3	..	2345b
29	579	4.4	-62 17	8.6	9.4	G5	6	..	15147b	79	1432	4.7	-6 31	7.55	7.53	B9	8	..	20546b
30	368	4.4	-74 7	8.8	9.8	K0	6	0.4	20652b	80	1396	4.7	-11 40	9.1	9.5	F5	5	..	20581b
31	1060	4.5	+55 43	9.5	9.5	A	2	..	37408i	81	1397	4.7	-11 56	9.1	10.3	K5	1	..	20581b
32	1257	4.5	+45 3	8.37	8.35	B9	3	..	38935i	82	1366	4.7	-13 12	7.9	8.2	Fo	10	..	20581b
33	1087	4.5	+15 56	7.22	8.00	G5	5	..	37568i	83	1347	4.7	-14 3	8.1	8.4	Fo	9	..	20581b
34	1043	4.5	+12 24	8.8	9.8	K0	2	..	37568i	84	3482	4.7	-23 23	9.7	8.3	A0	4	..	12466b
35	1112	4.5	+9 29	7.7	7.7	A0	7	..	38171i	85	2435	4.7	-38 58	9.3	9.4	Fo	4	..	20527b
36	1213	4.5	+8 16	9.9	9.9	A0	2	..	38171i	86	584	4.7	-59 30	8.0	8.9	G5	4	..	15147b
37	1192	4.5	-0 23	8.3	9.3	K0	3	0.3	38205i	87	577	4.7	-61 44	8.2	8.5	Go	8	..	15147b
38	1345	4.5	-9 7	8.5	9.3	G5	6	..	20581b	88	565	4.7	-69 42	9.6	10.8	K5	1	..	15167b
39	1346	4.5	-9 31	9.1	9.2	A2	3	..	20581b	89	233	4.8	+76 48	8.7	8.8	A2	2	..	37343i
40	1394	4.5	-10 10	8.66	9.44	G5	3	..	20581b	90	640	4.8	+63 41	9.7	10.5	G5	2	..	37545i
41	1395	4.5	-10 45	9.1	9.5	F5	2	..	20581b	91	1042	4.8	+52 45	9.2	9.3	A2	2	..	37419i
42	1395	4.5	-11 32	8.5	9.7	K5	4	..	20581b	92	1161	4.8	+51 42	8.0	8.0	A0	4	3.4	37408i
43	1392	4.5	-12 57	9.3	9.3	A0	4	..	20581b	93	1234	4.8	+23 50	9.1	9.7	Go	2	..	37446i
44	1346	4.5	-14 48	9.1	9.6	F8	4	..	20581b	94	1111	4.8	+18 44	7.9	7.9	A0	4	0.4	37446i
45	1294	4.5	-20 51	9.3	9.8	K0	1	..	12466b	95	1144	4.8	+13 30	8.9	8.9	A0	2	..	37568i
46	3021	4.5	-31 21	9.0	8.6	A5	5	..	42904b	96	1049	4.8	+11 41	8.1	9.2	K2	1	..	37579i
47	2433	4.5	-38 37	8.4	8.8	F2	6	..	20527b	97	1028	4.8	+10 20	8.7	8.7	A	3	E	38411b
48	1752	4.5	-51 37	9.2	9.2	F5	2	..	20547b	98	1158	4.8	+7 49	9.3	9.3	A0	2	..	38411b
49	204	4.6	+80 10	8.1	8.9	G5	3	..	37558i	99	1141	4.8	+6 20	7.8	7.9	A3	6	..	38171i
50	395	4.6	+70 50	7.61	8.39	G5	3	..	37343i	100	1147	4.8	+4 44	8.5	8.9	F5	3	..	38171i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

42300

6^h 4^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1327	4.8	-22 24	5.46	5.46	Ao	..	1,10	56,81	51	1112	5.1	+18 9	6.44	7.44	Ko	6	0,5	37568i
2	2398	4.8	-39 58	8.20	9.2	Ma	5	..	20649b	52	1147	5.1	+13 40	6.67	6.55	B5	5	3,7	38947i
3	2351	4.8	-42 8	5.48	5.8	Ao	9	R	42923b	53	1147	5.1	+2 56	6.85	6.83	B9	9	..	38171i
4	2444	4.8	-44 43	6.82	7.3	A5	4	..	42923b	54	1381	5.1	-4 11	9.1	9.5	F5	3	..	20894b
5	1757	4.8	-51 23	9.6	9.2	Go	3	..	20547b	55	1303	5.1	-7 24	10.2	10.2	A	1	..	20894b
6	1018	4.8	-53 33	9.5	9.8	Fo	2	..	20547b	56	1348	5.1	-9 24	9.9	10.2	F	1	..	20581b
7	1010	4.8	-56 4	8.6	9.8	K2	2	..	18484b	57	1401	5.1	-10 11	9.1	10.1	Ko	1	..	20581b
8	1281	4.9	+50 38	8.8	9.4	Go	1	E	37419i	58	1400	5.1	-11 26	10.2	11.0	G5	1	..	20581b
9	1259	4.9	+45 5	8.57	9.57	Ko	1	..	38935i	59	2764	5.1	-27 41	9.2	9.0	Ao	4	..	42904b
10	1388	4.9	+44 8	8.5	9.7	K5	1	..	37397i	60	2805	5.1	-29 23	8.7	9.8	Ko	2	..	42904b
11	..	4.9	+43 11	var.	var.	Md	..	R	M	61	2678	5.1	-35 0	8.65	9.0	Ao	7	..	20527b
12	1270	4.9	+33 56	8.7	8.7	B9	3	..	38126i	62	2274	5.1	-40 13	9.4	10.0	G5	2	..	20649b
13	1141	4.9	+30 42	8.0	8.0	A	3	R	38126i	63	580	5.1	-61 25	9.6	10.6	Ko	1	..	15147b
14	1036	4.9	+28 56	7.63	7.58	B8	..	0,5	56,81	64	546	5.1	-65 50	9.1	9.4	Fo	3	..	18485b
15	1147	4.9	+25 58	9.4	9.7	F	1	R	37440i	65	1043	5.2	+52 56	8.9	9.4	F8	1	..	37419i
16	1117	4.9	+9 34	8.5	8.6	A5	3	..	38411b	66	1356	5.2	+35 32	8.6	8.6	Ao	2	..	38126i
17	1145	4.9	+3 20	7.9	8.7	G5	4	..	38171i	67	1223	5.2	+31 12	7.9	8.0	A2	5	..	37377i
18	1379	4.9	-4 32	9.1	9.2	A2	3	..	20894b	68	1153	5.2	+17 17	8.5	8.5	B9	2	..	37568i
19	1433	4.9	-6 17	10.6	10.6	A	1	R	20894b	69	1383	5.2	-4 40	8.5	8.5	B9	5	..	20894b
20	1398	4.9	-11 37	10.4	10.7	F	1	..	20581b	70	1378	5.2	-17 26	9.9	10.0	A2	2	..	12630b
21	1367	4.9	-13 37	9.1	9.1	Ao	4	..	20581b	71	1370	5.2	-19 34	9.3	9.3	Ko	1	..	12630b
22	1283	4.9	-15 0	9.9	9.9	A	3	R	20581b	72	1302	5.2	-20 47	9.1	9.2	Fo	2	..	12466b
23	1285	4.9	-15 5	8.71	8.71	Ao	4	..	20581b	73	2680	5.2	-34 24	8.4	8.7	Fo	7	..	20527b
24	1375	4.9	-16 13	9.1	9.6	F8	3	..	12630b	74	858	5.2	-52 42	8.8	8.5	Fo	4	..	20547b
25	1374	4.9	-16 59	9.1	9.4	F2	2	..	12630b	75	971	5.2	-54 39	8.7	9.5	G5	4	..	20547b
26	1377	4.9	-17 16	7.66	7.66	Ao	8	0,2	12632b	76	619	5.2	-58 46	8.7	9.7	F5	2	..	18484b
27	1316	4.9	-18 6	6.17	6.17	Ao	7	..	42141b	77	1012	5.3	+27 6	9.1	9.1	A	1	..	37440i
28	1011	4.9	-56 5	8.3	9.6	Ko	4	..	18484b	78	1151	5.3	+25 35	9.4	10.2	G5	2	..	37440i
29	585	4.9	-59 58	9.5	9.8	Fo	2	..	15147b	79	1143	5.3	+21 36	7.8	7.6	B2	5	R	37446i
30	234	5.0	+76 52	7.94	9.12	K5	1	..	37343i	80	1095	5.3	+15 51	8.5	9.3	G5	2	..	37568i
31	1480	5.0	+43 26	8.6	8.6	Ao	2	..	38935i	81	1094	5.3	+15 6	9.6	9.7	A5	1	..	37579i
32	1148	5.0	+24 54	8.21	8.19	B9	3	..	37446i	82	1146	5.3	+3 31	9.1	9.1	B9	5	..	38171i
33	1296	5.0	+20 35	9.4	9.4	Ao	1	..	37446i	83	1132	5.3	-1 44	9.1	9.1	Ao	2	..	12682b
34	1302	5.0	+0 43	8.9	8.9	B8	4	2,2	15138b	84	1396	5.3	-12 31	8.5	9.5	Ko	5	..	20581b
35	1193	5.0	-0 17	8.3	8.3	Ao	6	1,5	12682b	85	1369	5.3	-13 53	10.2	10.3	A2	3	..	20581b
36	1194	5.0	-0 33	8.9	9.5	Go	3	0,2	12682b	86	1350	5.3	-14 31	10.2	11.2	Ko	1	..	20581b
37	1380	5.0	-4 19	9.1	9.1	Ao	4	..	20894b	87	1319	5.3	-18 58	8.9	8.9	Ao	4	..	12630b
38	1435	5.0	-6 24	10.2	10.5	Fo	2	..	20894b	88	3491	5.3	-23 33	8.9	8.9	F8	3	..	17395b
39	1302	5.0	-7 11	9.7	9.8	A2	2	..	20894b	89	3745	5.3	-24 14	8.5	8.4	Ao	7	..	42904b
40	1347	5.0	-9 25	8.5	9.3	G5	3	..	20581b	90	2674	5.3	-36 6	8.0	8.4	F2	7	..	20527b
41	1348	5.0	-14 34	5.67	6.67	Ko	8	..	12630b	91	2243	5.3	-41 16	7.6	8.8	G5	5	..	20649b
42	1318	5.0	-18 28	8.1	9.3	K5	4	..	12630b	92	1063	5.4	+55 56	9.2	9.2	A	2	..	37408i
43	1299	5.0	-20 54	8.9	8.0	B9	6	..	12466b	93	998	5.4	+54 43	8.5	9.0	F8	5	..	37408i
44	3028	5.0	-31 33	9.5	9.5	F5	2	..	42904b	94	1138	5.4	+29 43	8.21	8.19	B9	3	..	37377i
45	2446	5.0	-44 28	8.5	8.4	A2	7	..	20555b	95	1038	5.4	+28 48	8.4	8.5	A2	2	..	37440i
46	944	5.0	-55 18	9.2	9.6	F5	1	..	18484b	96	1122	5.4	+26 43	8.4	8.4	Ao	3	..	37440i
47	618	5.0	-58 56	8.7	9.4	F8	4	..	18484b	97	1153	5.4	+25 2	7.76	8.54	G5	2	..	37446i
48	367	5.0	-76 26	9.1	10.1	Ko	4	..	20652b	98	1151	5.4	+24 27	5.92	6.92	Ko	6	..	37446i
49	1062	5.1	+55 37	7.8	8.6	G5	4	..	37408i	99	1213	5.4	+22 32	9.0	9.0	Ao	3	..	37446i
50	1265	5.1	+47 26	7.8	7.8	B9	5	..	37428i	100	1302	5.4	+20 56	6.86	6.74	B5	8	..	37446i

THE HENRY DRAPER CATALOGUE.

42400

6^h 5^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1049	5.4	+12 2	7.7	7.6	B5	3	2,6	38947i	51	554	5.6	-60 33	9.3	10.3	Ko	1	..	15147b
2	1120	5.4	+9 2	8.3	8.3	Ao	4	..	38171i	52	446	5.6	-72 45	9.7	10.5	G5	2	..	15167b
3	1216	5.4	+8 32	9.9	10.0	A2	2	..	38411b	53	1000	5.7	+54 9	9.2	9.6	F5	2	..	37408i
4	1164	5.4	+7 42	8.9	9.5	Go	3	..	38411b	54	1140	5.7	+29 31	7.41	8.19	G5	3	..	37440i
5	1163	5.4	+7 35	9.1	9.2	A5	4	..	38411b	55	1031	5.7	+16 25	8.3	8.4	A5	3	..	37568i
6	1147	5.4	+3 54	8.2	8.2	B9	5	..	38171i	56	1180	5.7	+14 30	8.2	9.0	G5	3	..	37568i
7	1237	5.4	+1 14	9.6	10.1	F8	1	..	15138b	57	1151	5.7	+4 32	8.9	8.9	Ao	2	..	38171i
8	1199	5.4	-0 13	8.7	9.3	Go	2	..	12682b	58	1403	5.7	-11 5	9.3	9.4	A5	3	..	20581b
9	1133	5.4	-1 59	7.97	8.75	G5	4	..	12682b	59	1292	5.7	-15 2	6.70	6.70	Ao	6	..	42141b
10	1436	5.4	-6 19	10.2	10.2	Ao	2	..	20894b	60	1291	5.7	-15 52	9.3	10.3	Ko	1	..	12632b
11	1305	5.4	-7 5	8.5	9.5	Ko	4	0,4	20894b	61	2871	5.7	-31 0	7.5	8.9	Ko	6	..	42904b
12	1306	5.4	-7 42	9.1	9.1	Ao	3	..	20894b	62	2687	5.7	-34 4	9.3	9.9	F5	3	..	20527b
13	1335	5.4	-8 31	8.5	9.5	Ko	3	..	20546b	63	2256	5.7	-43 47	7.1	7.0	Ao	3	..	42923b
14	1303	5.4	-20 28	7.9	9.0	K2	4	..	12466b	64	524	5.7	-63 3	9.2	9.6	F5	4	..	15147b
15	1328	5.4	-22 17	9.1	8.9	Fo	3	..	12466b	65	549	5.7	-65 17	8.8	9.1	Fo	3	..	18485b
16	2974	5.4	-25 15	7.9	8.4	F8	5	..	42904b	66	1163	5.8	+51 12	6.28	7.28	Ko	6	0,5-	37408i
17	435	5.5	+66 11	8.0	8.4	F5	7	..	37545i	67	1267	5.8	+47 18	8.6	9.7	K2	2	..	38935i
18	1358	5.5	+48 31	8.0	8.0	Ao	2	..	37428i	68	1393	5.8	+44 33	8.0	8.0	A	1	..	37428i
19	1380	5.5	+36 10	8.6	8.6	Ao	3	..	38126i	69	1392	5.8	+44 32	8.1	8.1	A	1	..	37428i
20	1013	5.5	+27 10	8.2	8.2	Ao	4	..	37440i	70	1394	5.8	+44 15	9.0	9.1	A5	1	..	37397i
21	1097	5.5	+15 35	8.1	8.9	G5	5	..	37568i	71	1217	5.8	+32 43	5.96	7.03	K2	6	..	37377i
22	1217	5.5	+8 34	8.9	10.1	K5	1	..	38411b	72	1226	5.8	+31 27	9.0	9.0	Ao	2	..	38126i
23	1329	5.5	-22 5	8.0	8.6	Ko	5	..	12466b	73	1127	5.8	+26 30	8.6	8.6	Ao	3	..	37440i
24	2684	5.5	-34 19	10.4	10.2	A5	2	..	20527b	74	1243	5.8	+23 14	7.43	8.61	K5	3	..	37446i
25	2623	5.5	-37 22	10.0	9.6	F8	2	..	20527b	75	1146	5.8	+21 54	var.	var.	Ma	4	R	37446i
26	2448	5.5	-38 3	7.6	7.9	Ao	8	..	20527b	76	1154	5.8	+17 24	6.91	6.91	Ao	5	0,7	37446i
27	583	5.5	-61 1	8.6	10.1	K2	2	..	15147b	77	1151	5.8	+13 40	5.86	5.92	A2	..	2,8	56,82
28	368	5.5	-76 56	10.6	10.6	Ao	2	..	20652b	78	1221	5.8	+8 33	8.5	8.5	Ao	3	..	38171i
29	166	5.5	-81 34	9.7	10.0	F2	4	..	20557b	79	..	5.8	+3 55	..	..	Ao	3	..	15138b
30	1045	5.6	+52 1	9.5	9.5	Ao	2	..	37408i	80	1150	5.8	+3 37	8.9	8.9	Ao	4	..	38171i
31	1483	5.6	+43 50	9.5	9.6	A2	1	..	37397i	81	1149	5.8	+2 22	7.7	8.8	K2	3	..	38171i
32	1512	5.6	+40 14	9.0	9.4	F5	1	..	37397i	82	1502	5.8	-2 45	9.0	9.0	Ao	3	..	12682b
33	1215	5.6	+22 34	9.0	9.0	Ao	2	..	37446i	83	1308	5.8	-7 8	8.5	9.1	Go	2	..	20894b
34	1118	5.6	+18 16	8.7	8.7	Ao	2	..	37446i	84	1404	5.8	-11 50	8.5	9.5	Ko	7	..	20581b
35	1307	5.6	+0 12	8.5	8.9	F5	4	0,3	15138b	85	1381	5.8	-16 14	9.7	9.8	A2	2	..	12630b
36	1318	5.6	-3 34	9.1	9.1	Ao	2	..	20894b	86	2761	5.8	-26 41	6.19	7.5	Ko	4	..	8904b
37	1338	5.6	-8 57	8.9	8.9	Ao	5	..	20581b	87	2807	5.8	-32 3	8.4	9.9	K2	2	..	42904b
38	1349	5.6	-9 20	8.5	8.8	Fo	6	..	20581b	88	2074	5.8	-49 44	7.98	7.6	Ao	7	..	20547b
39	1402	5.6	-10 25	9.1	9.1	B9	3	..	20581b	89	2083	5.8	-50 58	8.6	8.6	F8	5	..	20547b
40	1353	5.6	-14 32	9.7	10.9	K5	1	..	20581b	90	947	5.8	-55 41	7.9	8.7	G5	7	..	18484b
41	1380	5.6	-16 34	10.2	10.2	Ao	2	..	12632b	91	1227	5.9	+31 26	9.4	9.4	Ao	2	..	38126i
42	1384	5.6	-17 23	9.3	9.4	A5	1	..	12630b	92	1170	5.9	+7 21	9.1	9.6	F8	2	..	38411b
43	1330	5.6	-22 45	5.71	5.8	F5	..	0,9	56,81	93	1125	5.9	+5 5	8.81	8.87	A2	2	..	38171i
44	3037	5.6	-31 51	8.7	9.5	K2	3	..	42904b	94	1153	5.9	+4 4	8.9	9.0	A3	3	..	38411b
45	2804	5.6	-32 24	9.6	9.8	Ao	2	E	42904b	95	1372	5.9	-13 7	10.2	10.2	Ao	3	..	20581b
46	2677	5.6	-36 46	8.7	9.6	F5	4	..	20527b	96	1355	5.9	-14 20	10.8	10.9	A2	2	..	20581b
47	2360	5.6	-42 47	8.4	8.2	Ao	6	..	20555b	97	1354	5.9	-14 48	10.6	10.7	A2	2	..	20581b
48	2452	5.6	-44 20	6.25	6.5	B9	8	..	42923b	98	1293	5.9	-15 8	10.4	10.4	Ao	3	..	20581b
49	2212	5.6	-46 50	8.0	9.3	Ko	4	..	15220b	99	2978	5.9	-25 37	7.4	8.6	F8	7	..	42904b
50	1760	5.6	-51 40	9.8	9.2	A5	2	..	20547b	100	2819	5.9	-29 26	7.9	9.5	Ko	4	..	42904b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

42500

6^h 5^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2688	m. 5.9	° 34 56	8.35	8.7	Fo	6	..	20527b	51	1313	m. 6.2	° 7 16	7.55	7.50	B8	10	..	20894b
2	2714	5.9	-35 18	10.9	10.2	A3	2	..	20527b	52	1356	6.2	-9 11	10.2	10.2	Ao	2	..	20581b
3	2246	5.9	-41 6	7.4	7.6	Ao	9	..	20649b	53	2983	6.2	-25 28	7.7	9.0	Ko	4	..	42904b
4	973	5.9	-54 25	7.1	8.6	Ko	6	..	20547b	54	2364	6.2	-42 40	9.2	9.4	F2	2	..	20555b
5	580	5.9	-62 40	9.4	10.4	Ko	2	..	15147b	55	2077	6.2	-49 4	10.0	9.7	Go	1	..	20547b
6	322	6.0	+73 0	7.7	8.0	F2	5	..	37343i	56	77	6.2	-85 56	6.74	8.0	Ko	4	5,10	11010b
7	368	6.0	+69 30	7.56	7.56	Ao	..	0,6	56,82	57	349	6.3	+71 1	8.8	9.4	G	2	..	38169i
8	1046	6.0	+52 2	7.7	8.0	F2	6	2,5	37408i	58	1362	6.3	+35 22	8.2	9.0	G5	3	..	38126i
9	1253	6.0	+19 49	5.70	5.68	B9	..	1,9-	2482c	59	1161	6.3	+17 47	8.5	9.6	K2	1	..	37568i
10	1151	6.0	+3 53	9.3	9.3	Ao	2	..	38171i	60	1187	6.3	+14 14	4.35	4.18	B3	..	0,R	56,82
11	1150	6.0	+2 28	10.3	10.4	A2	2	..	15138b	61	1174	6.3	+7 38	8.7	8.8	A2	2	..	38171i
12	1241	6.0	+1 37	8.9	9.0	A2	2	..	38205i	62	1152	6.3	+3 53	8.9	8.9	Ao	3	..	38171i
13	1353	6.0	-9 13	9.1	9.5	F5	5	..	20581b	63	1330	6.3	-3 23	9.0	9.0	B9	4	..	20894b
14	1352	6.0	-9 50	8.6	8.9	Fo	7	R	20581b	64	1533	6.3	-5 42	8.7	9.8	K2	4	..	20894b
15	1404	6.0	-10 30	9.1	9.6	F8	1	..	20581b	65	1407	6.3	-10 45	8.5	8.5	B9	6	..	20581b
16	1386	6.0	-17 11	9.0	10.0	Ko	1	..	12632b	66	1308	6.3	-20 19	8.5	8.3	B9	6	..	12466b
17	1385	6.0	-17 32	9.0	9.8	G5	1	..	12630b	67	1307	6.3	-20 22	9.3	9.0	Ao	4	..	12466b
18	2981	6.0	-25 17	9.5	9.3	A3	3	..	42904b	68	2984	6.3	-25 37	8.0	9.2	G5	3	..	42904b
19	2692	6.0	-34 9	8.4	8.7	Ao	7	..	20527b	69	2826	6.3	-29 48	7.38	7.5	B9	9	..	42904b
20	2715	6.0	-35 6	9.0	9.6	A3	4	..	20527b	70	2882	6.3	-30 53	9.5	9.5	G5	3	..	42904b
21	2283	6.0	-40 48	9.4	10.2	G5	1	..	20649b	71	1221	6.4	+22 40	9.8	9.8	A	2	..	37446i
22	2249	6.0	-41 45	10.2	9.7	Ao	2	..	20555b	72	1224	6.4	+8 49	8.8	8.8	B9	3	..	38171i
23	1020	6.0	-53 13	9.8	10.2	F5	1	..	20547b	73	1154	6.4	+6 56	8.7	9.9	K5	1	..	38411b
24	623	6.0	-58 45	7.6	9.2	Ko	5	..	18484b	74	1138	6.4	-1 59	8.82	8.82	Ao	4	..	12682b
25	493	6.0	-66 1	5.83	5.81	B9	..	1,6 R	56,122	75	1535	6.4	-5 10	9.3	9.3	Ao	5	..	20894b
26	218	6.1	+78 5	9.7	9.7	Ao	1	..	37343i	76	1441	6.4	-6 52	8.5	8.5	B9	4	..	20894b
27	947	6.1	+57 48	7.7	8.7	Ko	3	E	37408i	77	1315	6.4	-7 40	7.7	8.0	F2	5	..	20546b
28	1513	6.1	+40 54	8.5	8.6	A3	2	..	37429i	78	1405	6.4	-11 45	10.2	11.0	G5	1	..	20581b
29	1274	6.1	+33 0	8.0	8.0	B9	6	..	38126i	79	1358	6.4	-14 5	10.6	10.6	A	1	..	20581b
30	1151	6.1	+30 49	7.7	7.8	A3	4	..	37440i	80	1387	6.4	-17 37	9.1	9.9	G5	1	..	12630b
31	1158	6.1	+17 48	7.9	7.9	B9	4	..	37568i	81	1377	6.4	-21 49	8.7	9.3	K5	3	..	12466b
32	1124	6.1	+9 40	8.5	9.6	K2	3	..	38411b	82	1332	6.4	-22 20	9.1	8.9	A2	3	..	12466b
33	1137	6.1	-1 51	7.92	7.92	Ao	5	..	12682b	83	3514	6.4	-23 10	9.5	8.9	Ao	3	..	12466b
34	1328	6.1	-3 43	9.1	9.1	Ao	2	..	12682b	84	3759	6.4	-24 39	8.9	9.8	K2	2	..	42904b
35	1531	6.1	-5 26	9.3	9.6	F2	2	..	20894b	85	3048	6.4	-31 22	9.2	9.5	A3	4	..	42904b
36	1439	6.1	-6 44	5.97	5.97	Ao	4	..	20894b	86	3046	6.4	-31 40	9.7	9.5	Ao	3	..	42904b
37	864	6.1	-52 31	8.6	10.2	Ma	1	..	20547b	87	952	6.4	-55 13	8.9	9.6	K2	2	..	18484b
38	1022	6.1	-53 16	8.0	8.9	F8	7	..	20547b	88	1116	6.5	+46 33	9.2	9.5	F2	2	..	38935i
39	1023	6.1	-53 36	9.5	9.8	Fo	3	..	20547b	89	1396	6.5	+44 47	7.72	8.72	Ko	2	..	38935i
40	582	6.1	-62 8	5.05	7.2	Ko	..	..	28,198	90	1411	6.5	+38 25	8.7	8.8	A3	2	..	37397i
41	207	6.1	-79 44	10.0	10.3	F	1	..	20557b	91	1145	6.5	+29 25	9.1	9.2	A2	1	E	38126i
42	348	6.2	+71 56	9.0	9.4	F5	1	..	37343i	92	1159	6.5	+25 43	8.6	8.7	A2	2	..	37440i
43	1220	6.2	+22 56	6.30	7.48	K5	5	..	37446i	93	1157	6.5	+13 58	8.4	8.4	Ao	4	..	37568i
44	1254	6.2	+19 33	7.9	9.1	K5	2	..	37446i	94	1158	6.5	+13 43	7.8	7.8	B9	7	..	37568i
45	1035	6.2	+16 9	4.92	4.75	B3	..	2,9 R	56,82	95	1060	6.5	+11 45	8.3	9.3	Ko	1	..	37579i
46	1103	6.2	+15 22	8.9	9.7	G5	2	..	37568i	96	1059	6.5	+11 33	7.6	8.7	K2	3	..	37568i
47	1055	6.2	+12 30	8.7	10.1	Ma	..	..	M	97	1178	6.5	+7 26	6.91	6.72	B2	8	..	38171i
48	1172	6.2	+7 48	7.6	7.9	Fo	6	..	38171i	98	1177	6.5	+7 7	8.2	8.3	A2	3	..	38171i
49	1173	6.2	+7 22	9.3	9.3	Ao	1	..	38171i	99	1128	6.5	+5 14	8.9	9.0	A2	1	..	38411b
50	1151	6.2	+6 22	8.8	9.1	Fo	2	..	38171i	100	1152	6.5	+2 30	8.1	8.1	Ao	5	..	38171i

THE HENRY DRAPER CATALOGUE.

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6^h 6^m 5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1243	6.5	+ 1 48	8.4	8.4	Ao	2	..	38205i	51	487	6.7	- 70 5	10.7	10.8	A2	2	..	15167b
2	1204	6.5	- 0 45	8.3	8.3	Ao	7	1,4	12682b	52	1394	6.8	+ 41 30	8.0	8.0	Ao	5	..	37397i
3	1391	6.5	- 4 58	9.20	9.48	Fo	4	..	20894b	53	1275	6.8	+ 33 12	8.7	8.7	Ao	2	..	38126i
4	1359	6.5	- 9 36	7.9	7.9	Ao	7	..	20581b	54	1226	6.8	+ 22 30	8.8	8.9	A5	3	..	37446i
5	1402	6.5	- 12 43	9.1	9.2	A3	5	..	20581b	55	1044	6.8	+ 10 22	7.43	7.31	B5	5	3,6	38171i
6	1375	6.5	- 13 46	8.9	9.9	Ko	4	..	20581b	56	1131	6.8	+ 9 32	8.8	8.8	Ao	2	..	38171i
7	1313	6.5	- 20 47	9.1	8.9	A2	3	..	12466b	57	1393	6.8	- 4 38	6.04	6.02	B9	3	0,8	2345b
8	2776	6.5	- 27 30	10.4	9.5	A	2	..	42904b	58	1410	6.8	- 10 35	9.9	9.9	Ao	2	..	20581b
9	2728	6.5	- 35 44	10.0	10.0	Fo	2	..	20527b	59	1299	6.8	- 15 46	6.70	6.78	A3	5	..	42141b
10	2730	6.5	- 35 49	10.4	9.9	F2	2	..	20527b	60	1385	6.8	- 16 4	9.7	9.7	Ao	2	..	12630b
11	2286	6.5	- 40 52	9.8	9.7	A2	2	..	20649b	61	3764	6.8	- 24 22	8.5	8.9	Go	5	..	42904b
12	2087	6.5	- 50 39	8.8	8.8	G5	4	..	20547b	62	2837	6.8	- 29 45	10.0	9.8	A	1	R	42904b
13	233	6.5	- 77 42	9.9	10.5	Go	5	..	20652b	63	2642	6.8	- 37 50	9.3	9.3	F8	4	..	20527b
14	1164	6.6	+ 51 12	8.4	8.4	B8	3	..	37500i	64	2417	6.8	- 39 11	9.8	10.0	K5	2	..	20527b
15	1285	6.6	+ 50 49	8.9	9.4	F8	1	E	37419i	65	2366	6.8	- 42 54	9.0	10.0	Ko	1	R	20555b
16	1392	6.6	+ 41 44	6.95	6.95	Aop	8	1,6 R	37429i	66	2222	6.8	- 46 39	9.0	9.6	K2	2	..	15220b
17	1443	6.6	+ 37 11	6.58	6.58	Ao	7	2,8	37429i	67	2209	6.8	- 47 14	9.0	9.7	F5	3	..	15220b
18	1155	6.6	+ 6 50	7.09	7.65	Go	7	..	38171i	68	628	6.8	- 58 57	9.0	9.8	G5	2	..	18484b
19	1318	6.6	- 7 13	7.9	9.3	Ma	4	..	20546b	69	369	6.9	+ 69 12	8.9	10.0	K2	1	..	38169i
20	1333	6.6	- 22 4	9.3	9.2	Ao	3	..	12466b	70	1147	6.9	+ 29 4	8.2	8.3	A5	2	E	37377i
21	2780	6.6	- 27 8	5.79	7.3	Ko	6	..	8904b	71	1226	6.9	+ 8 29	9.1	9.2	A2	1	..	38171i
22	2887	6.6	- 30 47	9.0	8.7	Fo	5	..	42904b	72	1180	6.9	+ 7 46	9.1	9.5	F5	2	..	38411b
23	2815	6.6	- 32 24	9.0	9.2	F2	4	..	42904b	73	1130	6.9	+ 5 27	9.3	9.3	Ao	2	..	38411b
24	2412	6.6	- 39 32	10.0	9.1	A2	4	0,3	20527b	74	1129	6.9	+ 5 12	8.7	9.5	G5	2	..	38171i
25	2253	6.6	- 41 57	7.5	7.2	F8	3	..	42923b	75	1163	6.9	+ 4 42	7.8	7.8	Aop	7	R	38171i
26	2218	6.6	- 46 16	9.2	9.3	G5	2	..	15220b	76	1154	6.9	+ 2 29	9.6	9.7	A2	3	..	15138b
27	867	6.6	- 52 7	7.9	8.2	F8	8	..	20547b	77	1143	6.9	- 1 18	7.8	7.8	B8	5	..	37595i
28	590	6.6	- 61 40	9.6	9.7	A2	4	..	15147b	78	1443	6.9	- 6 46	10.2	10.2	Ao	2	..	20894b
29	555	6.6	- 67 24	8.8	10.0	K5	3	..	18485b	79	1411	6.9	- 10 13	7.21	8.21	Ko	6	..	20581b
30	570	6.6	- 69 54	9.1	10.1	Ko	3	..	15167b	80	1386	6.9	- 16 34	8.1	9.3	K5	2	..	12630b
31	486	6.6	- 70 27	9.7	9.7	Ao	4	..	15167b	81	2733	6.9	- 35 44	9.3	9.0	Ao	5	..	20527b
32	214	6.6	- 78 13	9.7	10.9	K5	3	..	20652b	82	2291	6.9	- 40 20	5.56	7.4	Ma	..	0,8	56,122
33	938	6.7	+ 60 2	5.56	6.56	Ko	6	E	37407i	83	2084	6.9	- 49 33	6.43	6.8	F5	9	..	20547b
34	1019	6.7	+ 27 28	8.6	8.9	F2	4	..	37440i	84	1027	6.9	- 53 56	8.9	9.8	Fo	3	..	20547b
35	1160	6.7	+ 25 40	9.5	9.5	A	1	..	37440i	85	584	6.9	- 62 18	9.6	10.6	Ko	1	..	15147b
36	1161	6.7	+ 24 27	9.0	9.0	Ao	2	..	37446i	86	574	7.0	+ 64 2	9.2	9.2	Ao	1	..	38154i
37	1107	6.7	+ 15 23	8.5	9.3	G5	2	..	37568i	87	1231	7.0	+ 31 27	9.4	10.2	G5	1	..	38126i
38	1317	6.7	+ 0 47	8.3	8.3	Ao	7	0,4	12682b	88	1110	7.0	+ 15 22	8.9	8.9	B9	3	..	37568i
39	1140	6.7	- 1 5	8.9	8.9	Ao	2	..	15138b	89	1161	7.0	+ 13 42	8.8	9.8	Ko	1	..	37579i
40	1442	6.7	- 6 56	7.9	8.2	F2	5	..	20546b	90	1446	7.0	- 6 31	5.09	4.92	B3	..	0,7	56,82
41	1298	6.7	- 15 34	9.5	10.5	Ko	1	..	12630b	91	1408	7.0	- 11 50	9.9	10.2	F2	1	..	20581b
42	2781	6.7	- 27 33	9.3	8.9	A2	4	..	42904b	92	1387	7.0	- 16 48	8.5	8.5	Ao	8	..	12630b
43	2834	6.7	- 29 19	9.0	9.8	G5	2	..	42904b	93	1390	7.0	- 17 32	9.9	10.0	A2	3	..	12630b
44	2219	6.7	- 46 20	9.0	8.7	Ao	6	..	15220b	94	1316	7.0	- 20 50	8.7	8.3	A3	6	..	12466b
45	868	6.7	- 52 32	9.0	9.1	F2	3	..	20547b	95	1336	7.0	- 22 48	8.7	7.7	B9	7	1,2	12466b
46	1026	6.7	- 53 50	10.1	10.1	Ao	2	..	20547b	96	2767	7.0	- 28 27	10.0	9.2	Ao	2	..	42904b
47	961	6.7	- 57 54	8.3	9.2	G5	4	..	18484b	97	2775	7.0	- 33 4	9.0	9.8	K2	1	..	44364b
48	592	6.7	- 59 2	9.1	9.8	Go	3	..	18484b	98	2699	7.0	- 34 48	6.69	7.4	Go	10	..	20527b
49	516	6.7	- 64 22	8.5	9.7	K5	3	..	15147b	99	2256	7.0	- 41 13	8.8	8.9	F8	4	..	20649b
50	571	6.7	- 69 26	9.0	9.4	F5	5	3,4	15167b	100	1028	7.0	- 53 3	9.0	10.4	Ko	2	..	20547b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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6^h 7^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	557	m. 7.0	° 67 16	7.7	8.7	Ko	7	0,3	18485b	51	2844	m. 7.3	° 30 0	9.10	9.8	Go	2	..	42904b
2	219	7.1	+78 27	8.0	8.8	G5	2	..	37343i	52	3059	7.3	-31 28	9.5	10.1	G5	1	..	42904b
3	370	7.1	+69 56	10.2	10.2	A	1	..	38169i	53	2296	7.3	-40 43	9.0	9.5	G5	3	..	20649b
4	519	7.1	+65 44	8.2	9.3	K2	5	..	37545i	54	520	7.3	-64 25	9.2	9.6	F5	4	..	15147b
5	1446	7.1	+37 0	8.2	9.4	K5	1	3,1	38126i	55	251	7.4	+75 20	9.22	9.36	A5	1	..	37343i
6	1385	7.1	+36 39	8.6	8.6	Ao	2	0,2	38941i	56	575	7.4	+64 52	7.55	8.55	Ko	7	..	37545i
7	1312	7.1	+20 6	8.40	8.54	A5	2	..	37446i	57	1399	7.4	+44 37	8.07	8.21	A5	3	..	37428i
8	1256	7.1	+19 51	8.25	8.39	A5	3	..	37446i	58	1259	7.4	+19 2	7.5	7.5	B9	6	1,6	37568i
9	1162	7.1	+13 39	8.8	8.8	B9	7	..	37568i	59	1195	7.4	+14 21	8.2	9.0	G5	2	..	37568i
10	1338	7.1	-3 20	8.5	8.6	A2	3	..	12682b	60	1165	7.4	+13 31	9.1	10.1	Ko	1	..	37579i
11	1405	7.1	-12 34	8.5	8.8	F2	8	..	20581b	61	1339	7.4	-3 36	8.3	9.1	G5	3	..	12682b
12	1378	7.1	-13 3	8.6	8.9	Fo	5	..	20581b	62	2705	7.4	-34 27	9.0	9.3	Ao	3	..	20527b
13	1301	7.1	-15 47	9.5	9.6	A2	4	..	12630b	63	1030	7.4	-53 52	8.5	9.5	Go	3	..	20547b
14	1303	7.1	-15 51	10.2	10.2	A	1	..	12630b	64	594	7.4	-59 26	7.9	8.5	Ko	5	..	15147b
15	2701	7.1	-34 14	9.4	10.5	F5	3	..	20527b	65	435	7.5	+68 21	8.1	8.2	A2	6	..	38169i
16	2736	7.1	-35 9	10.0	9.6	A2	3	..	20527b	66	1418	7.5	+38 37	8.5	8.5	Ao	3	..	37397i
17	2420	7.1	-39 36	10.0	9.4	Fo	2	..	20527b	67	1280	7.5	+33 16	6.80	7.98	K5	5	..	38126i
18	2224	7.1	-46 32	8.8	9.0	F2	5	..	15220b	68	1254	7.5	+23 46	8.8	9.8	Ko	2	..	37446i
19	1769	7.1	-51 22	7.5	8.0	Go	8	..	20547b	69	1049	7.5	+10 58	8.8	8.8	Ao	2	..	38411b
20	572	7.1	-69 14	9.0	9.1	A2	6	0,5	15167b	70	1048	7.5	+10 20	6.57	6.55	B9	9	..	38171i
21	953	7.2	+59 15	6.78	7.56	G5	6	..	37408i	71	1134	7.5	+9 5	8.1	8.1	B9	5	..	38171i
22	1279	7.2	+33 40	7.90	8.90	Ko	3	..	38126i	72	1231	7.5	+8 36	8.8	8.8	B8	3	..	38171i
23	1163	7.2	+25 23	8.5	8.5	Ao	4	..	37446i	73	1185	7.5	+7 19	7.9	9.1	K5	4	..	38171i
24	1064	7.2	+11 29	8.4	8.5	A5	2	..	37568i	74	1510	7.5	-2 56	9.1	9.6	F8	3	..	12682b
25	1380	7.2	-13 12	8.7	9.8	K2	2	..	20581b	75	1321	7.5	-7 18	8.1	9.2	K2	5	..	20546b
26	1305	7.2	-15 12	10.2	11.2	Ko	2	..	20581b	76	1342	7.5	-8 46	9.1	9.1	Ao	3	..	20581b
27	1304	7.2	-15 31	9.1	9.7	Go	1	..	12630b	77	1319	7.5	-20 28	9.1	8.9	Ao	3	..	12466b
28	1393	7.2	-17 25	8.5	9.5	Ko	3	..	12630b	78	1337	7.5	-22 52	9.3	9.0	G5	2	..	12466b
29	2784	7.2	-26 27	5.98	5.9	Ao	9	..	8904b	79	2790	7.5	-27 2	7.4	8.0	A2	4	..	8904b
30	2774	7.2	-28 47	8.5	9.2	G5	3	..	42904b	80	528	7.5	-63 17	9.5	9.6	A2	4	..	15147b
31	3058	7.2	-31 45	7.5	9.2	Ko	6	..	42904b	81	641	7.6	+63 18	8.6	9.2	Go	2	..	38154i
32	2089	7.2	-49 31	8.5	9.2	Ko	1	..	20547b	82	1361	7.6	+48 52	7.7	7.6	B5	6	..	37428i
33	208	7.2	-79 12	9.6	10.8	K5	1	..	20557b	83	1119	7.6	+46 25	7.28	7.23	B8	6	..	37428i
34	1509	7.3	+42 50	8.9	8.9	B9	3	..	37397i	84	1129	7.6	+18 43	6.21	6.16	B8	7	1,8	37446i
35	1395	7.3	+41 26	9.2	9.3	A2	2	..	37397i	85	1062	7.6	+12 8	8.8	9.2	F5	2	..	37568i
36	1553	7.3	+39 43	7.77	7.77	Ao	5	..	37429i	86	1186	7.6	+7 34	7.9	7.9	Ao	4	..	38171i
37	1448	7.3	+37 21	7.9	7.9	B9	6	1,3	38126i	87	1160	7.6	+6 3	6.78	8.13	Ma	5	..	38171i
38	1024	7.3	+27 12	9.4	10.8	Mb	..	R	M	88	1214	7.6	-0 10	9.36	9.42	A2	2	..	15138b
39	1164	7.3	+25 43	9.1	9.1	A	1	..	37440i	89	1147	7.6	-1 19	8.2	8.2	Ao	4	..	12682b
40	1251	7.3	+23 40	9.8	9.9	A3	2	..	37446i	90	1341	7.6	-3 42	9.5	9.5	Ao	3	..	20894b
41	1228	7.3	+8 54	8.9	8.9	Ao	1	..	38171i	91	1539	7.6	-5 48	9.5	9.8	F2	2	..	20894b
42	1230	7.3	+8 8	8.3	8.3	Ao	4	..	38171i	92	1322	7.6	-7 27	8.7	9.0	Fo	4	..	20546b
43	1413	7.3	-10 50	9.1	9.4	Fo	3	..	20581b	93	1368	7.6	-9 29	9.1	9.9	G5	2	..	20581b
44	1409	7.3	-11 54	8.7	9.7	Ko	4	..	20581b	94	1366	7.6	-9 42	8.3	9.3	Ko	4	..	20581b
45	1359	7.3	-14 25	8.1	7.9	B3	7	..	20581b	95	1414	7.6	-10 29	9.5	9.5	Ao	2	..	20581b
46	1307	7.3	-15 37	8.7	8.7	Ao	6	..	12630b	96	1410	7.6	-11 29	9.3	10.1	G5	2	..	20581b
47	1334	7.3	-18 10	6.79	7.86	K2	3	..	42141b	97	1407	7.6	-12 14	8.9	9.2	Fo	6	..	20581b
48	1383	7.3	-21 26	8.9	8.0	B8	6	..	12466b	98	1384	7.6	-13 7	9.0	10.0	Ko	3	..	20581b
49	3532	7.3	-23 45	8.3	7.4	B9	7	0,9	12466b	99	1383	7.6	-13 35	9.1	9.9	G5	3	..	20581b
50	2775	7.3	-28 35	8.1	8.3	Ao	6	..	42904b	100	1339	7.6	-22 46	9.5	9.2	Go	3	..	12466b

THE HENRY DRAPER CATALOGUE.

42800

6^h 7^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2779	m. 7.6	° 33 51	7.41	8.0	K2	8	..	20527b	51	2742	m. 7.9	° 35 32	10.7	9.9	A3	3	..	20527b
2	2091	7.6	-49 58	9.18	9.1	F5	3	..	20547b	52	2696	7.9	-36 22	8.0	8.4	A0	6	..	20527b
3	529	7.6	-63 12	9.3	10.5	K5	2	..	15147b	53	2186	7.9	-48 56	7.5	7.7	F2	7	..	20547b
4	553	7.6	-65 15	9.5	9.6	A2	2	..	18485b	54	531	7.9	-63 34	9.3	9.4	A2	5	..	15147b
5	1396	7.7	+41 47	8.0	8.0	A0	3	..	37429i	55	79	8.0	+86 46	6.57	7.35	G5	6	5,3	37546i
6	..	7.7	+27 43	var.	var.	Mc	..	R	M	56	309	8.0	+72 1	9.4	9.4	A0	1	..	37343i
7	1050	7.7	+10 40	6.46	7.24	G5	6	..	38171i	57	1052	8.0	+28 4	8.8	9.1	F	1	..	37440i
8	1187	7.7	+7 11	9.6	9.9	F0	1	..	38171i	58	1159	8.0	+21 28	9.8	9.8	A0	2	..	37446i
9	1168	7.7	+4 53	9.3	9.4	A2	2	..	38411b	59	1054	8.0	+10 17	7.8	7.9	A2	3	..	38171i
10	1149	7.7	-1 4	8.9	9.5	Go	2	..	12682b	60	1141	8.0	+9 39	7.67	7.62	B8	6	..	38171i
11	1416	7.7	-10 28	7.46	8.46	K0	5	..	20581b	61	1161	8.0	+6 24	9.3	9.3	A0	2	..	38171i
12	1408	7.7	-12 44	9.1	10.1	K0	4	..	20581b	62	1138	8.0	+5 32	8.9	9.0	A2	2	..	38171i
13	1361	7.7	-14 37	9.7	10.5	G5	2	..	20581b	63	1325	8.0	-7 16	8.1	9.5	Ma	4	..	20546b
14	2795	7.7	-27 13	7.7	8.9	K0	4	..	42904b	64	1413	8.0	-11 9	8.5	9.5	K0	4	..	20581b
15	2794	7.7	-27 54	7.48	8.0	F2	5	..	42964b	65	3010	8.0	-25 41	9.2	9.8	K0	1	..	42904b
16	1773	7.7	-51 23	7.9	9.2	K5	3	..	20547b	66	3069	8.0	-31 57	8.3	9.2	G5	2	..	42904b
17	871	7.7	-52 1	8.6	8.9	A0	3	..	20547b	67	234	8.0	-77 16	9.1	9.1	A0	5	..	20652b
18	371	7.8	+69 21	4.73	4.73	A0	..	..	56,82	68	955	8.1	+59 22	9.0	9.1	A2	2	..	38239i
19	1100	7.8	+56 58	7.40	7.96	Go	6	..	37408i	69	1049	8.1	+52 12	7.8	8.9	K2	3	..	37408i
20	1510	7.8	+42 10	8.0	8.5	F8	3	..	37429i	70	1272	8.1	+47 26	8.8	9.3	F8	2	..	37500i
21	1138	7.8	+9 39	7.9	7.9	A0	4	..	38171i	71	1168	8.1	+24 2	8.0	8.3	F0	6	..	37446i
22	1234	7.8	+8 42	9.9	10.0	A5	2	..	38411b	72	1177	8.1	+17 34	8.7	8.7	A0	2	..	37568i
23	1324	7.8	+0 48	8.4	8.4	A0	6	1,3	12682b	73	1118	8.1	+15 7	8.49	8.99	F8	3	..	37568i
24	1512	7.8	-2 29	6.48	6.48	A0	6	..	37595i	74	1206	8.1	+14 9	8.9	9.9	K0	1	..	37579i
25	1402	7.8	-4 2	9.1	9.2	A2	3	..	20894b	75	1252	8.1	+1 49	8.5	9.5	K0	2	0,1	15138b
26	1401	7.8	-4 15	9.5	9.9	F5	2	..	20894b	76	1328	8.1	+0 37	8.3	8.3	A0	7	0,3	12682b
27	1450	7.8	-6 43	9.7	10.7	K0	2	..	20894b	77	1327	8.1	+0 12	8.3	8.3	B8	3	..	12682b
28	1345	7.8	-8 51	9.1	9.5	F5	3	..	20581b	78	1513	8.1	-2 36	8.5	8.8	F0	3	..	12682b
29	1417	7.8	-10 19	10.4	10.4	A0	2	..	20581b	79	1405	8.1	-4 54	6.92	7.92	K0	6	..	20894b
30	1393	7.8	-16 7	10.2	10.2	A0	2	..	12630b	80	1451	8.1	-6 50	9.9	9.9	A	1	..	20894b
31	3005	7.8	-25 11	9.7	10.4	K2	1	..	42904b	81	1346	8.1	-8 42	6.70	6.68	B9	3	0,10	2345b
32	2793	7.8	-26 42	7.9	9.0	G5	4	..	42904b	82	1372	8.1	-9 31	9.7	10.1	F5	2	..	20581b
33	3064	7.8	-31 29	8.7	9.0	F2	3	..	42904b	83	1419	8.1	-10 16	7.64	8.71	K2	4	..	20581b
34	2349	7.8	-45 15	6.22	6.4	B9	7	..	42923b	84	1410	8.1	-12 27	9.1	9.1	B9	6	..	20581b
35	1776	7.8	-51 12	9.2	8.6	F0	5	..	20547b	85	1363	8.1	-14 32	9.7	10.0	F0	3	..	20581b
36	872	7.8	-52 46	8.2	8.2	F2	5	..	20547b	86	1395	8.1	-16 2	8.7	8.7	A0	6	..	12630b
37	593	7.8	-61 18	8.9	9.2	A0	4	..	15147b	87	1337	8.1	-18 58	9.3	9.4	A2	3	..	12630b
38	585	7.8	-62 58	9.3	9.9	Go	3	..	15147b	88	3012	8.1	-25 14	8.9	8.7	A0	4	..	42904b
39	1101	7.9	+56 45	7.72	9.07	Mb	4	..	37408i	89	2800	8.1	-26 1	7.26	8.9	K0	6	..	42904b
40	1227	7.9	+32 29	9.8	9.8	A	3	..	38126i	90	2481	8.1	-44 51	8.00	8.1	A0	2	..	42923b
41	1262	7.9	+19 22	7.5	8.3	G5	3	5,2	37446i	91	420	8.2	+67 46	9.2	10.2	K0	3	..	38169i
42	1202	7.9	+14 3	8.3	8.8	F8	6	..	37568i	92	1270	8.2	+45 38	8.0	8.0	A0	3	E	38935i
43	1188	7.9	+7 58	9.6	9.6	A0	2	..	38411b	93	1512	8.2	+42 11	8.7	9.3	Go	2	..	37397i
44	1137	7.9	+5 16	8.9	8.9	A0	2	..	38171i	94	1366	8.2	+35 16	9.1	9.4	F2	2	..	38126i
45	1164	7.9	+3 32	7.5	7.5	B8	7	..	38171i	95	1323	8.2	+20 22	8.7	8.7	A0	2	..	37446i
46	1158	7.9	+2 52	8.4	8.4	A0	3	..	38171i	96	1322	8.2	+20 13	9.0	8.9	B5	3	..	37446i
47	1403	7.9	-4 12	9.1	9.4	F2	3	..	20894b	97	1237	8.2	+8 20	9.3	9.3	B8	2	..	38171i
48	1412	7.9	-11 3	9.7	10.5	G5	1	..	20581b	98	1388	8.2	-13 58	9.9	10.0	A2	3	..	20581b
49	1387	7.9	-13 36	7.42	7.40	B9	10	..	20581b	99	3014	8.2	-25 13	7.62	8.4	F0	6	..	42904b
50	3786	7.9	-24 26	9.2	9.5	F0	3	..	42904b	100	2699	8.2	-36 49	10.4	9.1	B9	3	..	20527b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

42900

6^h 8^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2381	m. 8.2	° -42 34	8.9	8.8	Ao	3	..	20555b	51	311	m. 8.6	° +72 12	6.80	7.58	G5	5	..	37343i
2	2482	8.2	-44 12	8.6	9.3	G5	3	..	20555b	52	1282	8.6	+33 52	8.6	8.6	Ao	3	..	38126i
3	1559	8.3	+39 59	7.92	9.27	Mb	2	..	37429i	53	1262	8.6	+23 24	9.4	9.9	F8	2	..	37446i
4	1239	8.3	+31 42	8.7	8.7	Ao	3	..	38126i	54	1182	8.6	+17 57	5.74	5.88	A5	6	2,9 R	38947i
5	1161	8.3	+30 59	8.7	8.7	Ao	2	..	38126i	55	1211	8.6	+14 32	7.7	7.8	A2	6	..	37568i
6	1028	8.3	+27 39	8.2	9.3	K2	1	..	37440i	56	1210	8.6	+14 28	8.4	8.7	Fo	4	..	37568i
7	1264	8.3	+19 30	8.2	9.0	G5	3	..	37446i	57	1220	8.6	- 0 16	8.3	9.1	G5	3	5,2	15138b
8	1238	8.3	+ 8 44	8.5	8.3	B3	4	..	38171i	58	1155	8.6	- 1 47	8.3	8.7	F5	6	..	12682b
9	1216	8.3	- 0 28	8.7	8.8	A2	4	2,3	15138b	59	1515	8.6	- 2 13	7.8	7.8	B8	5	..	12682b
10	1152	8.3	- 1 2	8.9	9.0	A2	3	..	12682b	60	1410	8.6	- 4 34	8.4	8.4	Ao	6	..	20894b
11	1407	8.3	- 4 58	7.50	8.50	Ko	5	..	20894b	61	1328	8.6	- 7 40	9.1	9.5	F5	3	..	20894b
12	1453	8.3	- 6 20	9.1	10.1	Ko	2	..	20894b	62	1424	8.6	-10 18	9.1	9.6	F8	3	..	20581b
13	1327	8.3	- 7 25	8.5	9.5	Ko	4	5,4	20894b	63	1423	8.6	-10 36	7.7	8.0	F2	7	..	20581b
14	1338	8.3	-18 17	9.1	9.7	Go	2	..	12632b	64	1391	8.6	-13 43	10.2	10.2	Ao	3	..	20581b
15	1386	8.3	-21 28	9.0	9.2	Ao	2	..	12466b	65	1312	8.6	-15 23	9.3	10.4	K2	1	..	20581b
16	1342	8.3	-22 21	8.5	8.3	A2	5	3,2	12466b	66	1311	8.6	-15 27	8.9	8.9	Ao	7	..	20581b
17	2483	8.3	-44 53	7.10	8.4	K2	2	..	42923b	67	2865	8.6	-29 26	9.2	10.1	K2	1	..	42904b
18	596	8.3	-59 30	7.6	8.2	B8	9	..	15147b	68	2917	8.6	-30 27	7.9	8.9	B9	5	..	42904b
19	354	8.3	-73 41	10.1	10.5	F5	3	..	15167b	69	2310	8.6	-40 23	9.4	9.4	G5	3	..	20555b
20	1454	8.4	+37 52	9.4	9.4	A	1	..	37397i	70	2485	8.6	-44 24	8.6	8.1	Ao	5	..	20555b
21	1181	8.4	+17 8	8.3	8.8	F8	2	..	37568i	71	595	8.6	-61 52	9.9	10.3	F5	3	..	15147b
22	1164	8.4	+ 6 6	8.9	8.9	Ao	2	..	38171i	72	532	8.6	-63 56	9.6	10.4	G5	2	..	15147b
23	1171	8.4	+ 4 18	9.3	10.5	K5	1	..	38411b	73	869	8.7	+61 33	5.30	6.65	Ma	8	0,9	37408i
24	1456	8.4	- 6 22	8.4	9.2	G5	5	..	20894b	74	912	8.7	+58 52	7.6	7.7	A2	5	..	37408i
25	1455	8.4	- 6 44	9.9	10.4	F8	2	..	20894b	75	1515	8.7	+42 30	9.2	9.5	Fo	1	..	37397i
26	1373	8.4	- 9 3	8.3	9.1	G5	5	..	20581b	76	1514	8.7	+42 5	8.1	9.1	Ko	4	..	37429i
27	1398	8.4	-17 44	6.31	6.14	B3	5	6,6 R	8916b	77	1562	8.7	+39 46	8.6	9.7	K2	1	..	37397i
28	1343	8.4	-22 32	8.5	8.3	Ao	6	1,2	12466b	78	1563	8.7	+39 33	8.2	9.3	K2	1	..	37397i
29	2807	8.4	-26 36	9.5	9.3	F2	4	..	42904b	79	1370	8.7	+35 2	9.07	9.63	G	1	..	38126i
30	2306	8.4	-40 23	9.1	9.4	Ko	3	..	20555b	80	1244	8.7	+31 30	8.0	8.8	G5	2	..	38126i
31	2266	8.4	-41 33	9.3	9.7	Ko	1	..	20555b	81	1174	8.7	+25 17	8.2	9.3	K2	1	..	37440i
32	2240	8.4	-46 10	9.2	9.6	F8	2	..	18483b	82	1326	8.7	+20 38	9.8	9.8	A	1	..	37446i
33	980	8.4	-54 56	4.84	4.62	B1	..	R	28,198	83	1163	8.7	+ 2 52	7.9	8.9	Ko	3	..	38171i
34	588	8.4	-62 21	9.9	11.0	K2	1	..	15147b	84	1329	8.7	- 7 29	9.3	9.3	Ao	3	..	20894b
35	589	8.4	-63 0	9.4	10.0	Go	3	..	15147b	85	1330	8.7	- 7 43	9.3	9.6	Fo	4	..	20894b
36	451	8.4	-72 28	8.8	9.8	Ko	3	E	20652b	86	1413	8.7	-12 38	9.9	9.9	Ao	2	..	20581b
37	373	8.5	+69 36	6.83	6.97	A5	..	5,9	56,82	87	2806	8.7	-27 42	7.66	8.4	Ko	4	5,4	12664b
38	1455	8.5	+37 26	8.4	9.6	K5	1	0,1	38126i	88	2792	8.7	-28 59	7.42	8.1	F5	3	..	8904b
39	1163	8.5	+21 50	7.8	8.8	Ko	5	..	37446i	89	555	8.7	-65 4	8.54	9.6	Ko	3	..	18485b
40	1196	8.5	+ 7 55	8.9	10.1	K5	1	..	38411b	90	575	8.7	-69 40	9.0	10.0	Ko	5	0,3	15167b
41	1195	8.5	+ 7 0	9.1	10.2	K2	1	..	38411b	91	217	8.7	-78 30	10.2	11.2	Ko	2	..	20652b
42	1161	8.5	+ 2 3	8.8	10.0	K5	1	0,1 R	15138b	92	436	8.8	+68 43	6.93	7.49	Go	..	0,8	56,82
43	1219	8.5	- 0 34	8.9	10.0	K2	1	..	15138b	93	941	8.8	+60 32	8.8	9.1	Fo	3	..	38154i
44	1514	8.5	- 2 39	9.1	9.9	G5	2	..	12682b	94	952	8.8	+57 27	7.04	7.54	F8	7	..	37408i
45	1459	8.5	- 6 4	10.2	10.5	Fo	1	..	20894b	95	1241	8.8	+22 32	var.	var.	Ma	..	R	1465c
46	1374	8.5	- 9 51	9.36	9.92	Go	3	..	20581b	96	1184	8.8	+17 29	9.3	9.3	A	1	..	37446i
47	1308	8.5	-15 11	9.1	9.2	A5	5	..	20581b	97	1183	8.8	+17 28	8.5	8.5	B9	5	..	37568i
48	1309	8.5	-15 55	9.1	9.4	F	1	..	12630b	98	1123	8.8	+15 20	8.4	8.5	A5	4	..	37568i
49	3017	8.5	-25 14	8.9	9.0	Ao	3	..	42904b	99	1075	8.8	+11 51	7.7	7.7	Ao	5	..	37579i
50	210	8.5	-79 51	9.84	9.1	Go	5	..	20557b	100	1057	8.8	+10 10	8.52	9.59	K2	1	..	38411b

THE HENRY DRAPER CATALOGUE.

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6^h 8^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1144	8.8	+ 5 1	8.76	8.76	Ao	2	..	38171i	51	1397	9.0	-13 32	8.9	8.9	B9	6	..	20581b
2	1156	8.8	- 1 2	8.3	8.3	Ao	3	..	37595i	52	1399	9.0	-13 40	10.2	10.3	A2	2	..	20581b
3	1412	8.8	- 4 54	9.7	9.7	Ao	3	..	20894b	53	1367	9.0	-14 0	9.3	9.4	A5	4	..	20581b
4	1460	8.8	- 6 9	9.1	9.9	G5	3	..	20894b	54	1387	9.0	-19 14	9.5	9.2	A3	2	..	12630b
5	1376	8.8	- 9 10	9.3	9.9	Go	2	..	20581b	55	1326	9.0	-20 37	8.7	9.8	Ko	1	..	12466b
6	1392	8.8	-13 38	9.3	10.3	Ko	3	..	20581b	56	2810	9.0	-27 42	8.01	8.7	G5	3	..	42904b
7	1393	8.8	-13 59	9.7	10.3	Go	3	..	20581b	57	2871	9.0	-29 53	9.15	9.8	F5	3	..	42904b
8	1313	8.8	-15 7	8.65	9.72	K2	3	..	20581b	58	1499	9.1	+43 43	8.8	8.9	A3	2	..	37397i
9	2809	8.8	-27 14	9.5	9.0	A2	3	..	42904b	59	1155	9.1	+29 16	8.6	8.6	B9	3	..	37440i
10	2808	8.8	-27 43	7.71	9.0	K	3	R	12664b	60	1172	9.1	+13 14	8.7	8.7	B8	2	..	37568i
11	2709	8.8	-36 43	9.4	9.4	Go	2	..	20527b	61	1168	9.1	+ 6 37	8.9	8.9	Ao	1	..	38171i
12	355	8.8	-73 0	10.6	10.6	Ao	2	..	15167b	62	1146	9.1	+ 5 13	8.7	9.7	Ko	2	..	38171i
13	170	8.8	-80 35	9.4	9.8	F5	3	..	20557b	63	1260	9.1	+ 1 22	9.6	9.6	Ao	1	..	15138b
14	206	8.9	+80 55	8.1	8.9	G5	3	..	37558i	64	1349	9.1	- 3 54	9.1	9.1	Ao	5	..	20894b
15	437	8.9	+66 41	8.6	9.2	Go	4	..	37545i	65	1461	9.1	- 6 47	7.9	7.9	B8	8	..	20894b
16	831	8.9	+62 14	9.0	9.0	B9	4	1.3	37545i	66	1332	9.1	- 7 13	6.71	6.69	B9	3	..	2345b
17	1388	8.9	+36 12	6.42	6.70	Fo	6	5.8	37429i	67	1428	9.1	-10 46	9.3	9.4	A2	3	..	20581b
18	1153	8.9	+29 19	8.4	8.4	Ao	3	..	37440i	68	1315	9.1	-15 25	8.7	9.0	Fo	8	..	20581b
19	1269	8.9	+19 20	8.7	8.7	Ao	2	..	37568i	69	3026	9.1	-25 47	9.5	9.5	Fo	2	..	42904b
20	1076	8.9	+11 50	7.3	8.3	Ko	3	..	37579i	70	2800	9.1	-28 26	7.24	7.7	Ao	7	..	8904b
21	1165	8.9	+ 2 37	7.9	7.9	Ao	4	..	38171i	71	2714	9.1	-36 32	6.89	6.9	B3	5	5.4	9042b
22	1157	8.9	- 1 52	9.3	9.4	A3	2	..	12682b	72	1785	9.1	-51 39	10.0	9.7	Fo	1	..	20547b
23	1345	8.9	- 3 43	5.93	6.71	G5	6	0.8	37595i	73	1036	9.1	-53 23	8.5	9.0	Ao	6	..	20547b
24	1426	8.9	-10 47	8.7	8.8	A5	6	..	20581b	74	1053	9.2	+52 35	7.9	8.9	Ko	1	..	37419i
25	1396	8.9	-13 44	9.1	9.1	B9	5	..	20581b	75	1052	9.2	+52 22	8.4	8.4	Ao	2	..	37419i
26	1394	8.9	-13 58	9.7	9.8	A3	4	..	20581b	76	1432	9.2	+38 53	8.5	9.5	Ko	1	..	37397i
27	1366	8.9	-14 28	9.7	9.8	A2	3	..	20581b	77	1246	9.2	+31 53	8.6	8.6	Ao	2	..	38126i
28	1314	8.9	-15 21	6.88	7.88	Ko	9	..	20581b	78	1243	9.2	+22 20	8.6	8.4	Bo	2	..	37446i
29	1401	8.9	-16 5	9.5	9.5	Ao	4	R	12630b	79	1167	9.2	+21 15	9.5	10.1	Go	2	..	37446i
30	3798	8.9	-24 51	8.9	9.5	Ao	4	..	42904b	80	1056	9.2	+16 48	7.7	7.7	A	6	R	37568i
31	3025	8.9	-25 58	9.2	9.6	G5	2	..	42904b	81	1075	9.2	+12 21	8.5	8.9	F5	2	..	37568i
32	2842	8.9	-32 11	8.7	9.2	A3	4	..	42904b	82	1243	9.2	+ 8 20	8.8	10.0	K5	2	..	38411b
33	2756	8.9	-35 13	8.4	10.0	K2	1	..	20527b	83	1174	9.2	+ 4 35	6.99	7.99	Ko	5	..	38171i
34	2243	8.9	-46 18	9.0	9.3	F5	4	..	18483b	84	1169	9.2	+ 2 17	10.3	10.3	Ao	3	..	15138b
35	1026	8.9	-56 4	8.2	8.7	F2	8	..	18484b	85	1168	9.2	+ 2 12	9.6	9.7	A2	4	..	15138b
36	871	9.0	+61 6	9.0	10.1	K2	1	..	38239i	86	1378	9.2	- 9 45	9.1	9.4	Fo	2	..	20581b
37	1566	9.0	+39 14	9.8	9.8	A	1	..	37397i	87	1368	9.2	-14 54	9.7	10.8	K2	2	..	20581b
38	1304	9.0	+34 43	8.5	8.6	A2	4	..	38126i	88	1391	9.2	-21 14	8.1	7.9	Ao	6	2.8	8904b
39	1154	9.0	+29 33	4.45	5.45	Ko	..	0, R	56,82	89	1347	9.2	-22 31	9.5	9.2	A	2	..	12466b
40	1148	9.0	+26 43	9.4	9.5	A5	1	..	37440i	90	3028	9.2	-25 54	10.2	9.8	A5	2	..	42904b
41	1174	9.0	+24 36	8.6	9.8	K5	2	..	37446i	91	2667	9.2	-37 55	9.0	10.9	Ko	1	..	20527b
42	1270	9.0	+19 12	5.18	5.60	F5	10	0,10	37568i	92	637	9.2	-58 50	7.4	8.8	K2	5	..	15147b
43	1052	9.0	+16 4	6.73	7.51	G5	6	..	37568i	93	1433	9.3	+38 11	8.7	9.1	F5	3	..	37397i
44	1213	9.0	+14 38	6.82	6.80	B9	7	..	37568i	94	1459	9.3	+37 42	7.14	8.14	Ko	6	5.3	38126i
45	1074	9.0	+12 32	8.4	8.4	Ao	4	..	37568i	95	1180	9.3	+25 21	7.71	8.89	K5	3	..	37446i
46	1060	9.0	+10 21	8.9	9.0	A5	3	..	38411b	96	1057	9.3	+16 41	8.1	9.1	Ko	2	..	37568i
47	1170	9.0	+ 3 56	7.7	7.7	B9	6	..	38171i	97	1216	9.3	+14 44	8.8	8.8	B9	3	..	37568i
48	1415	9.0	- 4 14	9.3	9.3	Ao	4	..	20894b	98	1080	9.3	+11 42	8.1	8.1	B8	5	E	37568i
49	1355	9.0	- 8 38	8.9	9.9	Ko	3	..	20581b	99	1201	9.3	+ 7 56	8.9	9.0	A3	4	..	38411b
50	1398	9.0	-13 26	9.1	10.1	Ko	2	..	20581b	100	1200	9.3	+ 7 14	9.6	9.6	Ao	2	..	38411b

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6^h 9^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1174	m. 9.3	° 3 32	8.7	8.7	Ao	3	..	38171i	51	1187	m. 9.6	° 17 48	8.9	10.3	Ma	2	..	37568i
2	1338	9.3	+ 0 53	8.54	8.54	Ao	2	2,5-	38205i	52	1059	9.6	+16 29	7.5	8.7	K5	3	..	37568i
3	1420	9.3	-11 9	8.7	8.7	B9	6	..	20581b	53	1060	9.6	+16 11	5.28	5.26	B9	..	0, R	56,82
4	3030	9.3	-25 14	10.2	9.8	Fo	2	..	42904b	54	1203	9.6	+ 7 29	8.3	8.3	Ao	4	..	38171i
5	2928	9.3	-30 32	8.7	10.6	K5	1	..	42904b	55	1149	9.6	+ 5 49	8.4	9.4	Ko	2	0,2	15138b
6	2718	9.3	-36 36	8.5	8.8	G5	4	..	20527b	56	1351	9.6	- 3 51	10.2	10.3	A5	2	..	20894b
7	474	9.3	-68 49	5.21	5.19	B9	..	1,8 R	28,198	57	1421	9.6	- 4 32	5.76	5.76	Ao	..	2,9	56,82
8	578	9.3	-69 51	9.7	10.3	Go	2	..	15167b	58	1465	9.6	- 6 35	9.5	9.5	A	1	R	20894b
9	235	9.3	-77 2	10.3	11.3	K	1	R	20652b	59	1464	9.6	- 6 39	10.2	10.2	Ao	2	..	20894b
10	422	9.4	+67 56	8.6	9.2	Go	3	..	38169i	60	1463	9.6	- 6 49	8.5	9.5	Ko	4	..	20894b
11	1167	9.4	+30 50	8.6	8.6	B9	3	..	38126i	61	1431	9.6	-10 3	8.66	8.66	Ao	5	..	20581b
12	1173	9.4	+13 53	5.81	5.62	B2	..	1,8-	56,82	62	3577	9.6	-23 50	6.41	7.2	G5	9	5,10	12466b
13	1171	9.4	+ 2 20	7.26	7.24	B9	6	..	38171i	63	2231	9.6	-47 39	8.9	9.9	K2	2	..	15220b
14	1340	9.4	+ 0 45	9.3	9.3	B9	2	..	15138b	64	639	9.6	-58 16	8.6	9.4	G5	2	..	18484b
15	1420	9.4	- 4 55	9.3	9.7	F5	3	..	20894b	65	365	9.6	-75 52	9.4	10.6	K5	3	..	20652b
16	1343	9.4	-18 43	9.1	9.1	Ao	5	..	12630b	66	371	9.6	-76 23	10.0	10.8	G5	2	..	20652b
17	2817	9.4	-27 18	9.5	9.5	Ko	1	..	42904b	67	281	9.7	+74 54	7.87	8.37	F8	4	..	37343i
18	2880	9.4	-29 24	8.3	9.8	G5	3	..	42904b	68	521	9.7	+65 11	9.2	10.0	G5	2	..	37545i
19	2931	9.4	-30 3	8.10	8.3	Ao	7	..	42904b	69	872	9.7	+61 8	8.6	9.6	Ko	2	..	38154i
20	2727	9.4	-34 32	8.0	8.5	K2	4	..	20527b	70	914	9.7	+58 47	9.2	9.8	Go	1	..	38239i
21	2720	9.4	-36 32	9.4	9.7	F	1	R	20527b	71	1474	9.7	+49 31	7.37	7.43	A2	6	..	38935i
22	2668	9.4	-37 3	8.0	7.6	B8	7	..	20527b	72	1234	9.7	+32 57	8.0	8.0	Ao	4	..	38126i
23	2201	9.4	-48 35	9.0	8.6	Ao	4	..	20547b	73	1058	9.7	+28 14	7.8	7.8	Ao	4	..	37440i
24	913	9.5	+58 21	8.9	9.0	A2	2	..	37408i	74	1227	9.7	- 0 30	8.5	9.3	G5	3	..	15138b
25	1104	9.5	+56 39	8.9	9.9	Ko	2	..	37408i	75	1353	9.7	- 3 55	10.2	10.3	A2	2	..	20894b
26	1278	9.5	+45 41	8.4	8.4	Ao	2	..	38935i	76	1370	9.7	-14 9	10.3	11.5	K5	1	..	20581b
27	1517	9.5	+42 44	9.5	9.5	A	1	..	37397i	77	3937	9.7	-25 49	9.0	9.2	A2	3	..	42904b
28	1287	9.5	+33 58	8.1	8.2	A2	3	..	38126i	78	2811	9.7	-28 50	8.9	8.7	F2	4	..	42904b
29	1286	9.5	+33 14	7.71	7.77	A2	5	..	38126i	79	2883	9.7	-29 22	6.40	6.5	B8	8	..	8904b
30	1168	9.5	+30 33	8.8	8.8	Ao	1	..	38126i	80	2301	9.7	-43 36	8.5	8.7	G5	4	..	20555b
31	1174	9.5	+13 4	9.3	9.4	A3	3	..	37568i	81	1788	9.7	-51 53	8.8	10.0	K5	1	..	20547b
32	1173	9.5	+ 2 54	8.8	9.1	F2	2	..	15138b	82	522	9.7	-64 19	9.4	10.4	Ko	3	..	15147b
33	1172	9.5	+ 2 41	8.9	9.0	A2	3	..	38171i	83	373	9.7	-76 50	10.3	10.6	Fo	3	..	20652b
34	1335	9.5	- 7 56	9.5	9.5	B9	3	..	20894b	84	1121	9.8	+46 4	7.44	7.58	A5	5	..	37428i
35	1358	9.5	- 8 58	9.1	9.4	Fo	3	..	20581b	85	1141	9.8	+18 20	6.85	7.85	Ko	5	2,4	37568i
36	1344	9.5	-18 24	9.1	9.2	A3	3	..	12630b	86	1128	9.8	+15 52	8.8	8.8	Ao	2	..	37568i
37	3575	9.5	-23 19	8.7	8.5	Ao	6	0,2	12466b	87	1246	9.8	+ 8 54	8.7	8.7	Ao	2	..	38171i
38	2400	9.5	-42 58	8.3	7.6	Fo	2	..	42923b	88	1245	9.8	+ 8 29	7.7	8.7	Ko	4	..	38171i
39	2230	9.5	-47 22	9.0	9.6	Go	3	..	15220b	89	1169	9.8	+ 6 56	8.7	8.8	A5	2	..	38171i
40	2109	9.5	-50 45	7.5	7.6	Ao	9	..	20547b	90	1177	9.8	+ 3 50	8.4	8.4	B9	4	..	38171i
41	1787	9.5	-51 34	8.6	8.6	F2	6	..	20547b	91	1228	9.8	- 0 22	8.1	8.1	Ao	3	..	37595i
42	874	9.5	-52 32	9.1	9.1	F2	2	..	20547b	92	1160	9.8	- 1 40	8.1	8.2	A3	3	..	37595i
43	986	9.5	-54 6	8.2	8.9	Ko	7	..	20547b	93	1527	9.8	- 2 56	8.7	8.7	Ao	4	..	12682b
44	601	9.5	-59 46	7.7	8.2	F8	8	..	15147b	94	1423	9.8	- 4 7	8.5	9.7	K5	2	..	12682b
45	164	9.6	+83 49	9.0	9.3	Fo	3	..	38330i	95	1422	9.8	- 4 24	7.32	8.32	Ko	4	..	12682b
46	375	9.6	+69 8	9.4	10.2	G5	1	..	38169i	96	1467	9.8	- 6 32	9.1	9.1	Ao	6	..	20894b
47	1408	9.6	+44 46	8.6	9.6	Ko	1	..	37397i	97	2884	9.8	-29 52	9.00	9.8	G5	2	..	42904b
48	1036	9.6	+27 54	8.0	9.1	K2	2	..	37440i	98	2726	9.8	-36 15	9.4	9.5	F2	2	..	20527b
49	1150	9.6	+26 28	8.6	8.7	A2	2	..	37440i	99	597	9.8	-61 28	7.4	7.9	Fo	9	..	15147b
50	1276	9.6	+19 34	8.7	8.8	A2	3	..	37446i	100	372	9.8	-76 1	10.6	11.2	G	1	..	20652b

THE HENRY DRAPER CATALOGUE.

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6^h 9^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	171	9.8	-81 6	9.2	10.0	G5	2	..	20557b	51	1361	10.1	- 8 47	7.02	6.97	B8	10	..	20894b
2	220	9.9	+78 50	8.1	8.9	G5	3	0.3	37343i	52	1419	10.1	-12 51	8.5	8.6	A3	7	..	20581b
3	350	9.9	+71 19	8.5	8.5	A0	4	..	37343i	53	1348	10.1	-18 46	9.3	9.3	A0	2	..	12630b
4	1281	9.9	+45 53	7.67	8.74	K2	3	2.3-	37397i	54	3821	10.1	-24 41	8.9	9.2	G5	3	..	42904b
5	1060	9.9	+28 18	9.0	9.0	A0	2	..	37440i	55	2768	10.1	-35 53	10.0	9.5	A2	2	..	20527b
6	1270	9.9	+23 50	9.4	9.4	B9	2	..	37446i	56	2456	10.1	-39 34	10.2	9.7	A5	1	..	20527b
7	1250	9.9	+22 12	9.0	9.0	A0	1	..	37446i	57	641	10.1	-58 57	9.0	10.1	F8	2	..	15147b
8	1172	9.9	+21 9	9.4	9.3	B5	2	..	37446i	58	562	10.1	-60 2	8.62	8.6	F0	3	R	18484b
9	1220	9.9	+14 11	8.8	9.3	F8	4	..	37568i	59	957	10.2	+59 35	7.51	8.29	G5	5	..	37408i
10	1078	9.9	+12 8	8.5	9.0	F8	3	..	37568i	60	1238	10.2	+32 18	8.5	9.1	Go	2	..	38126i
11	1160	9.9	+ 9 48	8.7	8.8	A2	3	..	38171i	61	1182	10.2	+24 0	6.11	6.89	G5	7	0, R	37446i
12	1170	9.9	+ 6 33	8.3	8.3	A0	5	..	38171i	62	1163	10.2	+ 9 3	9.3	10.1	G5	2	..	38411b
13	1178	9.9	+ 3 56	8.5	8.5	B9	4	..	38171i	63	1248	10.2	+ 8 36	9.3	10.3	K0	3	..	38411b
14	1266	9.9	+ 1 49	9.1	9.2	A3	3	..	15138b	64	1207	10.2	+ 7 41	7.7	7.7	B9	7	..	38171i
15	1338	9.9	- 7 25	8.7	9.0	F0	7	..	20894b	65	1178	10.2	+ 4 6	8.9	10.0	K2	2	..	38411b
16	1381	9.9	- 9 27	9.1	10.1	K0	1	..	20581b	66	1175	10.2	+ 2 10	8.9	9.0	A2	2	..	38205i
17	1407	9.9	-16 36	9.1	9.2	A3	3	..	12630b	67	1427	10.2	- 4 35	9.5	9.5	A0	4	..	20894b
18	1407	9.9	-17 27	8.1	8.7	Go	5	..	12630b	68	1341	10.2	- 7 41	8.1	8.1	B9	9	..	20894b
19	2727	9.9	-36 42	9.4	9.1	F5	3	..	20527b	69	1425	10.2	-11 7	8.5	8.8	F0	5	..	20581b
20	2253	9.9	-46 51	8.5	10.5	Ma	1	..	18483b	70	1424	10.2	-11 15	9.7	10.1	F5	2	..	20581b
21	2106	9.9	-49 20	8.2	8.5	A0	6	..	20547b	71	1420	10.2	-12 19	9.1	9.9	G5	3	..	20581b
22	964	9.9	-55 46	8.6	9.6	K2	3	..	18484b	72	2770	10.2	-35 41	8.7	8.8	K0	3	..	20527b
23	599	9.9	-62 0	10.0	10.8	G5	2	..	15147b	73	2110	10.2	-49 35	9.2	9.7	F5	2	..	20547b
24	557	9.9	-65 17	7.59	8.5	K0	6	..	18485b	74	1793	10.2	-52 0	9.4	9.2	F2	2	..	20547b
25	558	9.9	-65 53	8.8	9.9	K2	2	..	18485b	75	603	10.2	-59 13	8.5	9.1	A0	4	..	15147b
26	415	9.9	-71 6	9.4	9.4	A0	6	0.3	15167b	76	563	10.2	-60 18	8.1	8.3	A0	8	..	15147b
27	1003	10.0	+53 42	7.52	7.52	A0	6	..	37408i	77	522	10.3	+65 40	8.5	9.5	K0	3	..	37545i
28	1172	10.0	+30 9	6.87	6.85	B9	..	1.7	56,82	78	958	10.3	+59 51	8.16	8.16	A0	4	..	37408i
29	1271	10.0	+23 14	8.4	9.2	G5	1	..	37446i	79	954	10.3	+57 11	8.4	9.0	Go	3	..	37408i
30	1337	10.0	+20 33	9.0	9.1	A2	3	..	37446i	80	1123	10.3	+46 1	7.7	7.7	A0	3	..	37428i
31	1067	10.0	+10 37	8.4	9.2	G5	2	E	37579i	81	1540	10.3	+40 56	7.6	7.6	A0	5	..	37429i
32	1469	10.0	- 6 14	4.09	5.09	K0	..	0.7 R	56,82	82	1281	10.3	+19 6	7.9	8.9	K0	2	..	37446i
33	1434	10.0	-10 12	9.1	9.1	B9	3	..	20581b	83	1209	10.3	+ 7 8	9.3	9.3	A0	2	..	38411b
34	1408	10.0	-17 26	9.1	9.1	A0	5	..	12630b	84	1173	10.3	+ 6 35	8.3	8.3	A0	4	..	38171i
35	1409	10.0	-17 48	8.7	9.5	G5	1	..	12630b	85	1172	10.3	+ 6 6	5.95	5.83	B5	9	..	38171i
36	1391	10.0	-19 30	7.9	8.6	Ma	2	..	12466b	86	1180	10.3	+ 3 59	7.4	7.3	B5	6	..	38171i
37	2937	10.0	-30 58	9.2	9.5	A5	3	..	42904b	87	1555	10.3	- 5 47	9.1	9.1	A0	4	..	20894b
38	2766	10.0	-35 45	8.4	8.8	K0	4	..	20527b	88	1364	10.3	- 8 36	7.7	8.1	F5	8	..	20894b
39	2323	10.0	-40 32	8.4	8.8	F2	5	..	20555b	89	1426	10.3	-11 47	8.9	9.5	Go	3	..	20581b
40	2283	10.0	-41 55	8.1	8.8	F0	5	..	20555b	90	1408	10.3	-16 11	8.5	8.9	F5	3	..	12630b
41	2304	10.0	-43 34	9.4	9.6	F0	3	..	20555b	91	1409	10.3	-16 24	8.4	8.5	A2	2	..	42141b
42	2233	10.0	-47 51	9.8	9.7	F5	2	..	15220b	92	1349	10.3	-18 3	8.7	9.7	K0	4	..	12630b
43	253	10.1	+75 42	8.07	8.85	G5	2	..	37343i	93	2841	10.3	-26 8	8.3	8.9	A0	7	..	42904b
44	1122	10.1	+46 28	6.46	6.74	F0	6	..	37428i	94	2946	10.3	-30 53	10.4	10.4	A	2	..	42904b
45	1251	10.1	+31 36	7.8	8.8	K0	2	..	38126i	95	2113	10.3	-49 2	9.0	8.9	K2	3	..	20547b
46	1062	10.1	+28 54	7.31	7.37	A2p	..	R	56,82	96	439	10.4	+66 40	8.6	9.2	Go	4	..	37545i
47	1081	10.1	+12 35	5.36	5.34	B9	..	1, 10	56,82	97	523	10.4	+65 32	8.6	9.2	Go	3	..	37545i
48	1426	10.1	- 4 35	8.9	8.9	B9	5	..	12682b	98	1147	10.4	+18 11	7.9	7.9	A0	5	0,4	37568i
49	1553	10.1	- 5 17	9.0	9.0	A0	5	..	20894b	99	1071	10.4	+10 19	6.84	7.84	K0	4	E	37579i
50	1470	10.1	- 6 50	9.0	9.3	F0	6	..	20894b	100	1250	10.4	+ 8 29	7.8	7.8	B9	4	..	38171i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

43300

6^h 10^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1349	10.4	+ 0 51	7.19	7.07	B5	5	..	37595i	51	417	10.6	- 71 29	9.8	10.8	Ko	2	..	15167b
2	1166	10.4	- 1 22	7.5	8.3	G5	3	..	37595i	52	1106	10.7	+ 56 34	7.06	8.06	Ko	8	..	37408i
3	1472	10.4	- 6 20	8.9	9.0	A2	5	..	20894b	53	1545	10.7	+ 40 13	7.47	7.45	B9	6	..	37427i
4	1342	10.4	- 7 58	8.9	9.0	A2	5	..	20894b	54	1290	10.7	+ 33 14	var.	var.	Mc	..	R	M
5	1406	10.4	- 13 6	9.5	10.5	Ko	2	..	20581b	55	1285	10.7	+ 19 2	7.3	7.7	F5	7	..	37446i
6	1394	10.4	- 19 42	8.7	9.1	G5	1	..	12466b	56	1183	10.7	+ 4 24	8.8	9.8	Ko	2	..	38411b
7	1354	10.4	- 22 12	8.4	8.8	Ko	3	..	12466b	57	1185	10.7	+ 4 13	9.3	9.3	Ao	2	..	38171i
8	3591	10.4	- 23 41	8.7	8.2	A5	4	2,4	42904b	58	1275	10.7	+ 1 12	6.34	6.76	F5	6	..	37595i
9	3045	10.4	- 25 16	9.0	9.2	Fo	3	..	42904b	59	1561	10.7	- 5 48	9.7	9.7	Ao	2	..	20894b
10	2816	10.4	- 33 9	8.7	8.9	A	2	..	10682b	60	1562	10.7	- 5 48	9.5	9.5	Ao	5	..	20894b
11	2114	10.4	- 49 23	9.0	9.7	K2	2	..	15220b	61	1345	10.7	- 7 15	8.9	9.4	F8	3	..	20894b
12	533	10.4	- 63 14	8.8	10.0	K5	3	..	15147b	62	1368	10.7	- 9 0	6.03	6.01	B9	4	..	2345b
13	374	10.4	- 76 20	9.3	10.3	Ko	4	..	20652b	63	1384	10.7	- 9 23	9.1	9.7	Go	2	..	20581b
14	1177	10.5	+ 30 2	8.11	8.17	A2	3	..	38126i	64	1386	10.7	- 9 33	9.1	9.5	F5	3	..	20581b
15	1189	10.5	+ 17 58	8.8	8.9	A5	2	..	37446i	65	1385	10.7	- 9 49	8.3	9.3	Ko	4	..	20581b
16	1223	10.5	+ 14 7	8.5	8.6	A5	5	..	37568i	66	1428	10.7	- 11 37	8.9	9.0	A3	3	..	20581b
17	1181	10.5	+ 4 19	6.44	6.27	B3	8	..	38171i	67	1421	10.7	- 12 33	9.0	9.3	F2	4	..	20581b
18	1234	10.5	- 0 28	5.68	6.10	F5	8	..	37595i	68	1407	10.7	- 13 18	9.9	10.0	A3	3	..	20581b
19	1431	10.5	- 4 53	6.00	6.06	A2	..	2,8	56,82	69	2898	10.7	- 29 34	7.08	7.5	Ao	6	..	8904b
20	1473	10.5	- 6 8	9.0	10.0	Ko	3	..	20894b	70	2775	10.7	- 35 15	9.0	8.8	F2	4	..	20527b
21	1373	10.5	- 14 37	10.6	10.6	Ao	2	..	20581b	71	2289	10.7	- 41 25	9.4	9.2	F5	2	..	20555b
22	1318	10.5	- 15 46	9.5	9.5	Ao	3	..	20581b	72	2376	10.7	- 45 0	8.04	7.8	A5	6	..	20555b
23	3046	10.5	- 25 39	8.9	10.1	G5	1	..	42904b	73	565	10.7	- 60 48	8.5	8.5	B9	7	..	15147b
24	2820	10.5	- 28 29	9.0	9.0	F5	3	..	42904b	74	534	10.7	- 63 17	9.6	10.0	F5	2	..	15147b
25	2681	10.5	- 37 32	8.4	8.9	K2	4	..	20527b	75	560	10.7	- 65 22	8.9	9.9	Ko	1	..	18485b
26	2511	10.5	- 38 45	8.7	9.4	K2	3	..	20527b	76	561	10.7	- 67 26	9.6	10.0	F5	2	..	18485b
27	2506	10.5	- 44 54	9.30	10.2	K5	1	..	20555b	77	211	10.7	- 79 31	10.8	10.8	B9	2	..	20557b
28	2373	10.5	- 45 2	8.70	8.4	A3	8	..	20555b	78	959	10.8	+ 59 3	4.42	4.42	Ao	..	0,10	56,82
29	1799	10.5	- 51 8	8.9	8.6	F2	5	..	20547b	79	1477	10.8	+ 49 13	8.0	8.8	G5	1	..	37428i
30	218	10.5	- 78 32	9.2	10.6	Ma	3	5,1	20652b	80	1124	10.8	+ 46 24	6.49	7.49	Ko	4	..	37428i
31	1410	10.6	+ 41 31	8.0	9.2	K5	1	..	37397i	81	1576	10.8	+ 39 30	7.12	8.19	K2	3	R	37397i
32	1543	10.6	+ 40 21	7.72	8.28	Go	3	..	37429i	82	1375	10.8	+ 35 10	6.62	6.96	F2	8	R	38126i
33	1575	10.6	+ 39 53	7.52	8.52	Ko	3	..	37429i	83	1191	10.8	+ 25 31	8.5	9.1	Go	2	..	37440i
34	1156	10.6	+ 26 31	8.2	9.2	Ko	1	..	37440i	84	1275	10.8	+ 23 46	6.26	6.07	B2	7	0,R	37446i
35	1191	10.6	+ 17 12	6.47	7.47	Ko	6	5,4	37568i	85	1253	10.8	+ 22 12	8.4	8.7	Fo	4	..	37446i
36	1094	10.6	+ 11 15	8.5	9.7	K5	1	..	38411b	86	1084	10.8	+ 12 18	5.11	5.53	F5	..	0,R	56,82
37	1254	10.6	+ 8 10	9.9	9.9	Ao	1	..	38411b	87	1096	10.8	+ 11 29	8.7	10.1	Ma	..	..	M
38	1176	10.6	+ 6 34	8.1	8.4	Fo	5	..	38171i	88	1256	10.8	+ 8 4	9.6	9.7	A2	3	..	38411b
39	1182	10.6	+ 3 27	8.2	8.2	Ao	3	..	38171i	89	1530	10.8	- 2 21	8.7	9.9	K5	2	..	20894b
40	1180	10.6	+ 2 26	9.6	9.6	Ao	1	..	15138b	90	1388	10.8	- 9 26	9.1	9.9	G5	2	..	20581b
41	1350	10.6	+ 0 0	8.83	8.89	A2	4	..	15138b	91	1441	10.8	- 10 50	9.7	9.7	Ao	2	..	20581b
42	1559	10.6	- 5 43	10.2	10.3	A2	2	..	20894b	92	1430	10.8	- 11 39	9.5	9.6	A2	2	..	20581b
43	1560	10.6	- 5 55	9.1	10.1	Ko	2	..	20894b	93	1429	10.8	- 11 52	6.56	6.62	A2	10	..	20581b
44	1440	10.6	- 10 38	9.9	10.0	A2	2	..	20581b	94	1408	10.8	- 13 27	9.1	9.6	F8	5	..	20581b
45	1427	10.6	- 11 53	8.7	8.8	A3	7	..	20581b	95	1375	10.8	- 15 1	10.2	10.2	Ao	3	..	20581b
46	3828	10.6	- 24 23	8.7	9.5	Ko	2	..	42904b	96	1336	10.8	- 20 15	5.74	7.7	Ko	8	..	12466b
47	2843	10.6	- 26 10	8.7	9.8	K5	2	..	42904b	97	3833	10.8	- 24 41	9.7	9.6	F5	1	..	42904b
48	2823	10.6	- 28 37	8.7	9.0	F2	3	..	42904b	98	3049	10.8	- 25 51	8.7	9.8	K2	2	..	42904b
49	643	10.6	- 58 56	8.8	8.9	Ao	3	..	15147b	99	116	10.8	- 83 13	10.1	10.2	A5	2	..	20557b
50	491	10.6	- 70 16	9.3	9.4	A5	5	..	15167b	100	1546	10.9	+ 40 45	8.6	8.6	Ao	1	..	37397i

THE HENRY DRAPER CATALOGUE.

43400

6^h 10^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1578	10.9	+39 57	8.57	8.65	A3	4	..	37397i	51	2780	11.1	-35 25	10.0	9.5	F8	1	..	20527b
2	1579	10.9	+39 10	8.2	8.2	A0	3	..	37429i	52	2292	11.1	-41 37	7.6	7.6	F2	7	..	20555b
3	1243	10.9	+32 18	8.0	8.4	F5	5	..	38126i	53	2295	11.1	-41 59	9.4	8.8	A0	4	..	20555b
4	1167	10.9	+9 50	10.3	10.3	A0	2	..	38411b	54	2121	11.1	-50 0	9.2	9.7	K0	1	..	20547b
5	1166	10.9	+9 3	7.8	7.8	B9	5	..	38171i	55	561	11.1	-65 34	4.88	6.7	Mb	..	5, R	28, 198
6	1156	10.9	+5 8	7.06	7.04	B9	8	..	38171i	56	1478	11.2	+49 41	8.2	9.2	K0	1	..	37419i
7	1185	10.9	+3 7	8.1	8.1	A0	4	..	38171i	57	1527	11.2	+42 23	8.5	9.1	Go	2	..	37397i
8	1352	10.9	+0 54	7.74	7.72	B9	6	..	12682b	58	1157	11.2	+18 57	7.08	8.08	K0	5	..	37446i
9	1532	10.9	-2 36	9.1	9.1	A0	3	..	12682b	59	1156	11.2	+18 25	8.3	9.1	G5	2	..	37446i
10	1359	10.9	-3 42	9.7	9.7	A0	3	..	20894b	60	1257	11.2	+8 0	9.9	10.0	A2	1	..	38411b
11	1475	10.9	-6 11	7.9	7.9	B8	9	5,2	20894b	61	1278	11.2	+1 6	6.44	6.39	B8	5	..	37595i
12	1442	10.9	-11 1	10.3	10.3	A0	2	..	20581b	62	1534	11.2	-2 52	8.0	8.0	A0	4	..	37595i
13	1409	10.9	-13 19	9.5	9.8	F0	4	..	20581b	63	1362	11.2	-3 21	8.7	8.8	A5	7	0,2	20894b
14	1376	10.9	-14 55	10.4	11.0	Go	1	..	20581b	64	1363	11.2	-3 58	9.1	9.7	Go	2	..	20894b
15	1320	10.9	-15 47	8.9	8.9	B9	6	..	20581b	65	1435	11.2	-4 28	9.1	9.1	A0	4	..	12682b
16	1396	10.9	-19 2	9.3	9.1	F0	2	..	12630b	66	1347	11.2	-7 1	9.3	9.8	F8	2	..	20894b
17	2335	10.9	-40 35	10.2	9.7	A0	2	..	20555b	67	1348	11.2	-7 44	9.0	9.1	A2	5	..	20894b
18	2291	10.9	-41 16	8.7	9.5	K0	1	..	20555b	68	1444	11.2	-10 14	9.1	9.1	A0	4	..	20581b
19	2512	10.9	-44 42	9.0	9.0	F0	4	..	20555b	69	1422	11.2	-12 42	8.9	9.2	F2	4	..	20581b
20	960	11.0	+59 52	8.21	9.39	K5	1	..	38154i	70	1399	11.2	-19 46	8.1	8.5	F8	3	..	12466b
21	1580	11.0	+39 7	8.0	9.1	K2	1	..	37397i	71	2909	11.2	-29 20	7.28	7.3	A2	5	..	8904b
22	1178	11.0	+21 39	9.0	9.1	A5	4	..	37446i	72	2470	11.2	-39 15	10.0	10.2	K0	1	..	20527b
23	1533	11.0	-2 15	9.0	9.0	A0	4	0,2	12682b	73	1034	11.2	-56 19	8.9	9.9	K5	2	..	18484b
24	1361	11.0	-3 56	8.7	9.7	K0	4	..	20894b	74	237	11.3	+76 18	8.9	8.9	A0	2	..	37343i
25	1346	11.0	-7 51	9.9	10.0	A2	2	..	20894b	75	439	11.3	+68 55	9.2	10.0	G5	2	..	38155i
26	1370	11.0	-8 24	9.9	9.9	A0	3	..	20894b	76	1377	11.3	+35 38	8.7	10.1	Mb	1	..	38126i
27	1443	11.0	-10 49	8.4	8.4	B9	7	..	20581b	77	1247	11.3	+32 55	9.4	9.4	A	1	..	38126i
28	1321	11.0	-15 34	9.3	9.7	F5	5	..	20581b	78	1246	11.3	+32 32	8.0	8.1	A3p	6	R	38126i
29	1352	11.0	-18 27	6.24	7.24	K0	4	5,8	42141b	79	1257	11.3	+22 11	8.0	8.8	G5	5	..	37446i
30	2957	11.0	-30 8	9.10	9.5	G5	1	..	42904b	80	1159	11.3	+18 43	7.8	8.8	K0	3	..	37446i
31	2467	11.0	-39 26	10.9	9.7	G5	1	..	20527b	81	1228	11.3	+14 12	8.5	8.5	B9	4	..	37568i
32	607	11.0	-59 23	9.1	10.1	K	1	..	15147b	82	1187	11.3	+3 9	8.9	8.9	A0	3	0,3	15138b
33	608	11.0	-59 45	8.5	9.1	Go	3	..	15147b	83	1389	11.3	-9 7	9.3	9.3	A0	3	..	20894b
34	567	11.0	-60 13	8.56	9.5	K2	4	..	15147b	84	1390	11.3	-9 34	8.7	9.7	K0	5	..	20581b
35	419	11.0	-71 43	9.3	10.5	K5	3	0,2	15167b	85	1445	11.3	-10 8	8.81	9.15	F2	4	..	20581b
36	424a	11.1	+67 51	8.6	9.6	K0	1	..	38169i	86	1423	11.3	-12 42	8.9	9.2	F0	5	..	20581b
37	1108	11.1	+56 17	8.0	9.0	K0	3	..	37408i	87	1379	11.3	-14 24	9.1	9.9	G5	4	..	20581b
38	1376	11.1	+35 21	8.6	9.4	G5	1	..	38126i	88	1322	11.3	-15 20	9.3	9.3	A0	6	..	20581b
39	1244	11.1	+32 37	9.8	9.8	B9	1	..	38126i	89	1398	11.3	-19 28	7.7	7.9	B9	6	1,2	12466b
40	1045	11.1	+27 6	9.4	9.5	A2	1	..	37440i	90	2743	11.3	-36 55	8.7	9.5	G5	2	..	20527b
41	1186	11.1	+4 26	9.3	9.3	A0	2	..	38411b	91	2419	11.3	-42 4	8.5	9.5	K2	3	..	20555b
42	1353	11.1	+0 45	8.9	9.9	K0	2	..	15138b	92	1805	11.3	-51 56	9.0	9.4	K0	2	..	20547b
43	1354	11.1	+0 2	7.33	7.28	B8	5	..	37595i	93	535	11.3	-63 54	8.9	9.9	K0	3	..	15147b
44	1432	11.1	-11 33	9.5	10.5	K0	2	..	20581b	94	326	11.4	+73 57	9.4	9.9	F8	3	..	37343i
45	1411	11.1	-13 41	4.99	4.97	B9	..	1,9	56,82	95	1165	11.4	+29 15	7.7	7.7	A0	..	0,4	56,82
46	1378	11.1	-15 0	10.2	11.2	K0	1	..	20581b	96	1139	11.4	+15 53	7.18	7.16	B9	7	..	37568i
47	1357	11.1	-18 35	9.0	9.8	G5	2	..	12630b	97	1183	11.4	+13 44	8.4	9.4	K0	1	..	37579i
48	3836	11.1	-24 21	9.2	8.7	A2	3	..	42904b	98	1161	11.4	+5 45	9.6	9.7	A3	2	..	38171i
49	2833	11.1	-28 10	9.2	8.7	F2	4	..	42904b	99	1281	11.4	+1 54	9.1	9.2	A2	4	0,2	15138b
50	2958	11.1	-30 49	7.49	8.0	A2	8	..	42904b	100	1371	11.4	-8 48	9.3	10.7	Mb	2	..	20894b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

43500

6^h 11^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1416	m. 11.4	° -17 32	9.9	10.2	Fo	1	..	12632b	51	564	m. 11.7	° -65 31	8.8	9.9	K2	2	..	18485b
2	1339	11.4	-20 10	7.48	8.5	Ko	2	..	12466b	52	376	11.7	-76 40	8.6	9.2	Go	8	..	20652b
3	3055	11.4	-25 9	9.65	9.9	Ko	1	..	42904b	53	238	11.7	-77 56	9.2	10.0	G5	5	..	20652b
4	1806	11.4	-51 38	6.86	7.3	Ao	10	..	20547b	54	173	11.7	-81 4	9.7	10.1	F5	1	..	20557b
5	570	11.4	-60 12	8.5	9.2	G5	3	..	15147b	55	207	11.8	+80 21	8.4	9.5	K2	3	..	3833oi
6	236	11.4	-77 30	10.2	10.6	F5	2	..	20652b	56	235	11.8	+77 32	8.6	8.9	Fo	2	..	37343i
7	642	11.5	+63 3	8.9	9.7	G5	2	..	37545i	57	1530	11.8	+42 29	8.9	9.0	A3	1	..	37397i
8	1109	11.5	+56 56	9.0	9.3	Fo	3	..	37408i	58	1447	11.8	+38 16	7.8	9.0	K5	1	..	37397i
9	1348	11.5	+20 51	8.8	8.9	A2	2	..	37446i	59	1292	11.8	+33 12	9.0	9.8	G5	1	..	38126i
10	1089	11.5	+12 1	9.3	10.1	G5	4	..	37568i	60	1282	11.8	+23 55	8.8	10.2	Ma	..	..	M
11	1180	11.5	+6 2	8.9	8.9	Ao	3	..	38171i	61	1352	11.8	+20 29	8.6	8.7	A2p	4	R	37446i
12	1282	11.5	+1 23	9.1	9.4	Fo	3	5,3	15138b	62	1184	11.8	+13 24	8.7	8.7	B9	3	..	37579i
13	1477	11.5	-6 9	8.7	9.9	K5	1	..	12682b	63	1183	11.8	+6 54	9.1	9.7	Go	2	5,1	38411b
14	1380	11.5	-14 2	10.4	10.4	Ao	2	..	20581b	64	1182	11.8	+6 48	10.3	10.3	A	1	..	38411b
15	1325	11.5	-15 22	9.3	10.1	G5	4	..	20581b	65	1181	11.8	+6 7	8.5	8.5	Ao	3	..	38171i
16	1413	11.5	-17 0	7.7	8.5	G5	7	..	12630b	66	1397	11.8	-9 36	9.5	10.3	G5	2	..	20581b
17	1356	11.5	-22 10	8.7	8.6	Ao	4	..	12466b	67	1434	11.8	-11 7	8.9	9.3	F5	4	..	20581b
18	609	11.5	-59 54	7.77	8.6	Ko	5	..	15147b	68	1417	11.8	-13 57	9.5	10.0	F8	3	..	20581b
19	607	11.5	-61 26	6.75	6.9	B9	6	..	42927b	69	1384	11.8	-14 18	10.6	10.9	Fo	2	..	20581b
20	492	11.5	-70 20	8.9	10.0	K2	4	..	15167b	70	1406	11.8	-21 50	9.3	9.1	A2	2	..	12466b
21	873	11.6	+61 29	8.9	9.7	G5	2	..	38239i	71	1358	11.8	-22 43	9.1	9.4	K	1	..	12466b
22	1058	11.6	+52 25	9.2	9.6	F5	2	..	37419i	72	3624	11.8	-23 7	9.5	8.5	G5	4	..	12466b
23	1285	11.6	+47 25	7.00	7.42	F5	5	..	37428i	73	2865	11.8	-26 58	8.1	9.3	Ko	2	..	42904b
24	1049	11.6	+27 13	9.4	9.5	A5	1	..	37440i	74	2886	11.8	-32 30	8.0	8.0	B9	5	..	10682b
25	1173	11.6	+9 59	5.29	5.35	A2	..	R	56,82	75	2754	11.8	-34 55	8.55	8.2	F5	7	..	20527b
26	1216	11.6	+7 6	6.41	6.36	B8	8	..	38171i	76	2786	11.8	-35 24	9.4	8.9	A2	3	..	20527b
27	1217	11.6	+6 59	8.3	8.3	B9	3	..	38171i	77	2690	11.8	-37 44	9.4	8.8	B9	4	..	20527b
28	1164	11.6	+5 58	8.5	9.7	K5	1	..	38171i	78	2340	11.8	-40 4	10.9	10.0	Fo	1	..	20527b
29	1163	11.6	+5 15	9.6	9.7	A2	1	..	38411b	79	2130	11.8	-49 4	8.8	8.8	F5	3	..	20547b
30	1478	11.6	-6 27	8.5	8.6	A2	6	..	20894b	80	372	11.8	-74 49	10.5	10.6	A3	3	..	20652b
31	1395	11.6	-9 55	7.81	8.81	Ko	7	..	20581b	81	1169	11.9	+26 28	8.0	9.1	K2	2	..	37440i
32	1414	11.6	-13 4	9.5	9.5	Ao	4	..	20581b	82	1267	11.9	+22 41	9.0	9.0	B8	2	..	37446i
33	2520	11.6	-38 40	10.4	11.1	Ao	3	..	20527b	83	1233	11.9	+14 5	6.48	6.46	B9	8	..	37568i
34	2322	11.6	-43 12	8.8	9.0	Fo	4	..	20555b	84	1221	11.9	+7 28	8.9	9.7	G5	2	..	38171i
35	610	11.6	-59 32	9.1	9.1	Ao	3	..	15147b	85	1167	11.9	+5 45	8.9	9.7	G5	1	..	38171i
36	356	11.6	-73 34	8.9	10.1	K5	3	3,2	15167b	86	1166	11.9	+5 18	9.6	9.6	Ao	2	..	38411b
37	1071	11.7	+28 2	7.42	7.42	Ao	6	..	37440i	87	1168	11.9	+5 8	5.81	6.37	Go	9	..	38171i
38	1237	11.7	-0 6	8.58	8.53	B8	2	..	37595i	88	1285	11.9	+1 43	7.8	8.9	K2	2	..	37595i
39	1176	11.7	-1 10	9.9	9.9	A	2	..	12682b	89	1361	11.9	+0 56	8.94	9.50	Go	2	..	15138b
40	1370	11.7	-3 11	8.7	8.7	Ao	7	..	20894b	90	1360	11.9	+0 15	8.9	9.0	A2	3	..	12682b
41	1368	11.7	-3 19	8.7	9.9	K5	4	..	20894b	91	1541	11.9	-2 18	9.3	9.3	A	2	R	12682b
42	1349	11.7	-7 18	8.6	8.6	Ao	4	..	20894b	92	1385	11.9	-15 0	10.4	10.9	F8	2	..	20581b
43	1414	11.7	-16 15	8.7	8.8	A5	5	..	12630b	93	1327	11.9	-15 15	9.5	10.5	Ko	2	..	20581b
44	1415	11.7	-16 35	5.88	5.76	B5	..	2,7-	56,82	94	1421	11.9	-17 55	8.3	8.3	Ao	5	..	12630b
45	1420	11.7	-17 32	9.3	9.4	A2	2	..	12630b	95	3846	11.9	-24 58	9.15	8.7	Ao	4	..	42904b
46	2749	11.7	-36 34	9.4	9.7	Go	1	..	20527b	96	3063	11.9	-25 14	9.2	9.6	Ko	1	..	42904b
47	2244	11.7	-47 18	8.2	8.4	F2	6	..	18483b	97	1811	11.9	-51 33	9.4	9.1	Go	2	..	20547b
48	2129	11.7	-49 46	8.8	9.1	Ko	4	..	20547b	98	1038	11.9	-56 53	6.8	7.8	Ko	8	..	18484b
49	1043	11.7	-53 35	9.2	10.2	Ko	1	..	20547b	99	571	11.9	-60 25	8.9	8.8	A3	5	..	15147b
50	1037	11.7	-56 2	9.3	9.9	G	1	..	18484b	100	377	11.9	-76 19	10.5	10.6	A2	2	..	20652b

THE HENRY DRAPER CATALOGUE.

43600

6^h11^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	378	m. 11.9	° -76 54	9.8	10.3	F8	3	..	20652b	51	1260	m. 12.2	° + 8 55	8.8	10.0	K5	1	..	38411b
2	..	11.9	-77 14	..	..	K	1	..	20652b	52	1170	12.2	+ 5 43	9.6	10.2	Go	1	..	38411b
3	1450	12.0	+38 18	8.7	8.7	Ao	2	..	37397i	53	1288	12.2	+ 1 22	9.3	9.3	B8	3	2,2	15138b
4	1251	12.0	+32 20	9.0	9.0	Ao	2	..	38126i	54	1482	12.2	- 6 5	8.3	8.3	B9	6	..	12682b
5	1263	12.0	+31 9	8.7	8.7	Ao	1	..	38126i	55	1483	12.2	- 6 45	9.3	10.1	G5	2	..	20894b
6	1185	12.0	+30 18	8.8	9.1	F	1	..	38126i	56	1375	12.2	- 9 0	10.6	10.6	A	1	..	20894b
7	1291	12.0	+19 30	7.50	7.48	B9	5	..	37446i	57	1386	12.2	-14 20	10.2	10.7	F8	2	..	20581b
8	1286	12.0	+ 1 2	8.49	9.49	Ko	2	E	12682b	58	2872	12.2	-26 32	8.9	9.3	A5	3	..	42904b
9	1564	12.0	- 5 51	10.2	10.3	A5	2	..	20894b	59	2480	12.2	-39 17	9.0	9.5	K2	3	..	20527b
10	1481	12.0	- 6 54	9.7	10.2	F8	1	..	20894b	60	2482	12.2	-39 50	9.20	9.7	K2	2	..	20527b
11	1373	12.0	- 8 28	10.2	10.3	A2	2	..	20894b	61	2301	12.2	-41 20	8.7	8.8	Fo	4	..	20555b
12	1399	12.0	- 9 37	9.3	9.3	Ao	3	..	20581b	62	1200	12.3	+17 9	8.3	8.3	Ao	2	..	37446i
13	1419	12.0	-13 50	9.1	9.5	F5	4	..	20581b	63	1171	12.3	+ 5 51	8.4	8.7	Fo	4	..	38411b
14	3065	12.0	-25 2	9.40	9.6	K	1	R	42904b	64	1442	12.3	- 4 38	9.1	9.1	B9	4	..	12682b
15	2217	12.0	-48 45	8.8	8.5	F5	3	..	20547b	65	1565	12.3	- 5 19	7.9	8.0	A2	8	..	20894b
16	878	12.0	-52 19	8.8	8.8	A2	5	..	20547b	66	1485	12.3	- 6 13	8.3	8.3	B9	6	..	12682b
17	598	12.0	-62 2	8.4	8.8	F5	4	..	15147b	67	1352	12.3	- 7 48	8.5	8.9	F5	5	..	20894b
18	565	12.0	-65 30	7.0	7.4	F5	8	..	18485b	68	1450	12.3	-10 53	9.3	9.9	Go	2	..	20581b
19	833	12.1	+62 26	8.1	9.3	K5	2	..	38239i	69	1437	12.3	-11 23	9.5	9.6	A2	3	..	20581b
20	834	12.1	+62 15	9.0	9.1	A2	2	..	38154i	70	1328	12.3	-15 6	7.91	8.91	Ko	5	..	20581b
21	1014	12.1	+54 17	7.26	7.54	Fo	6	..	37408i	71	1345	12.3	-20 10	8.23	9.1	Ko	1	..	12466b
22	1556	12.1	+40 46	9.4	9.4	Ao	2	..	37397i	72	1347	12.3	-20 36	8.3	8.2	Ao	5	..	12466b
23	1584	12.1	+39 49	8.2	8.5	Fo	2	..	37429i	73	2759	12.3	-34 20	8.7	8.8	F5	4	..	20527b
24	1054	12.1	+27 14	6.72	7.72	Ko	6	..	37440i	74	2755	12.3	-36 10	9.0	9.7	G5	1	..	20527b
25	1199	12.1	+17 40	8.5	8.5	A	2	..	37446i	75	2220	12.3	-48 22	8.2	7.7	Ao	5	..	20547b
26	1363	12.1	+ 0 30	9.9	9.9	Ao	2	..	15138b	76	2135	12.3	-49 44	9.0	9.1	Ao	6	..	20547b
27	1448	12.1	-10 2	8.31	9.38	K2	4	..	20581b	77	1045	12.3	-53 2	8.6	9.3	G5	4	..	20547b
28	1436	12.1	-12 0	6.83	7.17	F2	10	..	20581b	78	580	12.3	-69 44	8.19	7.7	Fo	7	0,8-	18485b
29	1420	12.1	-13 57	9.5	10.3	G5	1	..	20581b	79	421	12.3	-71 1	10.6	11.0	F5	2	..	15167b
30	1423	12.1	-17 29	8.5	9.7	K5	1	..	12630b	80	200	12.4	+79 44	8.4	9.5	K2	1	..	37343i
31	1400	12.1	-19 19	8.3	8.3	A3	4	..	12466b	81	1318	12.4	+34 16	8.8	8.9	A2	2	..	38126i
32	3067	12.1	-25 18	10.2	9.6	A	1	..	42904b	82	1080	12.4	+15 59	8.3	8.4	A2	3	2,2	37579i
33	2869	12.1	-26 1	9.3	9.9	K	1	..	42904b	83	1235	12.4	+14 25	5.98	5.98	Ao	9	..	37568i
34	2870	12.1	-26 25	8.7	9.6	G5	2	..	42904b	84	1289	12.4	+ 1 57	8.8	8.8	B9	3	..	15138b
35	2846	12.1	-27 28	8.1	9.3	Neb.	3	..	42904b	85	1290	12.4	+ 1 49	8.2	8.2	B8	4	..	37595i
36	2936	12.1	-29 45	6.62	8.3	K2	8	..	42904b	86	1566	12.4	- 5 37	9.9	9.9	B9	3	..	20894b
37	2278	12.1	-46 58	8.2	9.3	K2	3	..	18483b	87	1428	12.4	-12 13	8.9	10.1	K5	2	..	20581b
38	1044	12.1	-53 20	8.4	9.3	Ko	5	..	20547b	88	2848	12.4	-28 7	9.0	9.1	A5	3	..	42904b
39	566	12.1	-65 30	8.5	9.1	G	2	..	18485b	89	998	12.4	-54 10	8.6	9.6	Fo	3	..	20547b
40	579	12.1	-69 14	9.3	10.3	Ko	3	0,3	15167b	90	651	12.4	-58 47	8.7	9.1	Go	3	..	15147b
41	219	12.1	-78 56	9.9	10.5	Go	4	..	20652b	91	1415	12.5	+41 8	8.0	8.6	Go	5	..	37397i
42	140	12.1	-82 49	9.7	10.1	F5	3	..	20557b	92	1297	12.5	+33 50	7.8	8.1	Fo	5	..	38126i
43	1127	12.2	+46 16	9.4	9.7	Fo	2	..	37428i	93	1073	12.5	+28 5	8.0	9.0	Ko	2	..	37440i
44	1380	12.2	+35 14	6.60	7.60	Ko	7	..	38126i	94	1181	12.5	+ 9 33	9.1	9.2	A2	3	..	38411b
45	1294	12.2	+33 31	8.6	9.0	F5	2	..	38126i	95	1186	12.5	+ 6 43	8.9	8.9	Ao	2	..	38171i
46	1170	12.2	+29 49	6.86	6.86	Ao	..	0,7	56,82	96	1174	12.5	+ 5 56	8.9	9.5	Go	2	..	38411b
47	1285	12.2	+23 51	8.8	9.8	Ko	1	..	37446i	97	1193	12.5	+ 4 44	9.10	9.88	G5	1	..	38171i
48	1188	12.2	+13 21	8.5	8.6	A5	3	..	37579i	98	1373	12.5	- 3 1	9.3	10.3	Ko	3	E	20894b
49	1187	12.2	+13 3	8.8	8.8	B9	3	..	37579i	99	1443	12.5	- 4 58	9.20	9.20	Ao	2	..	20894b
50	1104	12.2	+11 4	8.3	8.6	F2	3	..	37579i	100	1558	12.6	+40 41	8.0	9.0	Ko	1	..	37397i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

43700

6^h 12^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
		m.	°									m.	°						
1	1589	12.6	+39 51	8.22	8.72	F8	2	..	37429i	51	1319	12.9	+34 41	7.67	7.65	B9	6	..	38126i
2	1207	12.6	+25 23	8.0	8.0	B8	5	..	37440i	52	1075	12.9	+28 29	10.0	10.1	A2	1	..	37440i
3	1289	12.6	+23 3	8.7	8.5	B2	2	..	37446i	53	1297	12.9	+23 2	8.1	7.9	B1	3	R	37446i
4	1083	12.6	+16 45	8.2	9.0	G5	1	..	38947i	54	1299	12.9	+19 23	8.9	8.9	A0	2	..	37446i
5	1182	12.6	+9 21	8.1	8.5	F5	3	..	38171i	55	1231	12.9	+7 47	8.9	8.9	A0	3	..	38411b
6	1228	12.6	+7 13	9.9	10.0	A2	2	..	38411b	56	1372	12.9	+0 30	8.3	8.3	A0	3	..	12682b
7	1194	12.6	+4 24	8.7	8.7	A0	4	..	38171i	57	1445	12.9	-4 21	6.83	7.83	K0	3	..	37595i
8	1294	12.6	+1 53	9.1	9.4	F0	1	..	15138b	58	1571	12.9	-5 27	9.7	9.7	A0	2	..	20894b
9	1374	12.6	-3 5	9.3	9.9	G0	4	E	20894b	59	1358	12.9	-7 52	8.7	9.7	K0	4	..	20894b
10	1567	12.6	-5 17	8.7	9.7	K0	5	..	20894b	60	1455	12.9	-10 41	6.67	6.95	F0	7	0,8	20894b
11	1568	12.6	-5 53	10.2	10.2	B9	3	..	20894b	61	1431	12.9	-13 0	9.1	9.1	B9	5	..	20581b
12	1354	12.6	-7 2	9.5	9.8	F2	3	..	20894b	62	1365	12.9	-22 20	6.88	7.5	A0	7	0,7	8904b
13	1353	12.6	-7 25	8.6	9.2	G0	2	..	20894b	63	3861	12.9	-24 32	8.9	9.3	A3	2	..	42904b
14	1403	12.6	-9 17	9.7	9.8	A2	2	..	20894b	64	2852	12.9	-28 53	8.7	9.6	K2	2	..	42904b
15	1402	12.6	-9 36	8.5	9.5	K0	6	..	20581b	65	2799	12.9	-35 23	7.23	7.6	K0	8	..	20527b
16	1452	12.6	-10 41	9.1	9.2	A3	4	1,2	20581b	66	2798	12.9	-35 56	10.9	10.0	A0	1	..	20527b
17	1365	12.6	-18 35	7.5	8.0	F8	7	2,4	12630b	67	2288	12.9	-46 5	8.2	8.5	A0	7	..	18483b
18	2763	12.6	-34 1	7.6	8.8	K5	4	..	20527b	68	970	12.9	-55 46	8.9	9.4	F8	3	..	18484b
19	2349	12.6	-40 8	9.15	9.5	K0	2	..	20555b	69	613	12.9	-61 26	9.7	10.3	G0	2	..	15147b
20	2335	12.6	-43 8	8.5	8.2	F0	5	..	20555b	70	457	12.9	-73 0	7.8	7.8	A0	7	2,4	24561b
21	1040	12.6	-56 54	8.5	9.6	K5	3	..	18484b	71	951	13.0	+60 49	7.40	7.46	A2	5	0,7	37408i
22	573	12.6	-60 11	9.9	10.0	A3	2	..	15147b	72	1060	13.0	+27 1	8.5	8.5	B9	4	..	37440i
23	236	12.7	+77 18	8.1	9.3	K5	1	..	37343i	73	1177	13.0	+26 1	9.0	9.4	F5	1	..	37440i
24	1129	12.7	+46 41	8.2	9.0	G5	2	..	37428i	74	1268	13.0	+8 34	8.9	8.9	A0	3	..	38411b
25	1190	12.7	+21 13	8.1	9.1	K0	3	..	37446i	75	1269	13.0	+8 3	8.9	9.9	K0	3	..	38411b
26	1297	12.7	+19 36	8.7	8.7	A0	2	..	37446i	76	1196	13.0	+4 1	7.5	8.5	K0	4	..	38171i
27	1175	12.7	+5 57	8.8	8.9	A2	2	..	38171i	77	1247	13.0	-0 21	8.3	8.2	B5	6	..	12682b
28	1192	12.7	+3 2	8.9	8.9	B8	2	R	15138b	78	1185	13.0	-1 38	8.9	8.9	A0	3	..	12682b
29	1570	12.7	-5 14	9.9	9.9	A	2	..	20894b	79	1486	13.0	-6 39	9.3	9.4	A2	3	..	20894b
30	1355	12.7	-7 53	9.7	10.0	F0	3	..	20894b	80	1379	13.0	-8 10	9.7	9.8	A5	3	..	20894b
31	1378	12.7	-8 59	10.2	11.2	K	1	..	20894b	81	1424	13.0	-16 58	8.5	8.6	A3	6	..	12630b
32	1438	12.7	-11 21	8.5	8.8	F0	6	..	20581b	82	1349	13.0	-20 50	9.3	9.1	A2	3	E	12630b
33	1423	12.7	-13 18	10.2	11.0	G5	1	..	20581b	83	3651	13.0	-23 55	10.2	8.9	G5	2	..	12466b
34	1387	12.7	-14 28	9.5	10.5	K0	2	..	20581b	84	3136	13.0	-31 30	8.3	8.6	A0	7	..	42904b
35	1388	12.7	-14 58	10.3	10.3	A0	2	..	20581b	85	2800	13.0	-35 6	4.51	6.1	K0	..	5,8R	28,198
36	3857	12.7	-24 54	8.60	9.4	K5	2	..	42904b	86	2767	13.0	-36 39	9.0	10.0	K5	1	..	20527b
37	2534	12.7	-38 32	8.4	8.8	A5	5	..	20527b	87	2306	13.0	-41 35	9.4	9.2	G0	3	..	20555b
38	239	12.7	-77 37	9.9	10.9	K0	3	..	20652b	88	2541	13.0	-44 23	8.6	9.6	K0	2	..	20555b
39	1452	12.8	+38 28	7.10	7.38	F0	5	2,8	37429i	89	2542	13.0	-44 35	8.5	8.7	B9	7	..	20555b
40	1293	12.8	+23 38	6.59	7.37	G5	5	0,R	37446i	90	2401	13.0	-45 53	9.4	9.7	F5	1	..	18483b
41	1230	12.8	+7 33	9.1	9.7	G0	3	..	38411b	91	2292	13.0	-46 51	9.0	9.3	F8	3	..	18483b
42	1177	12.8	+5 48	9.3	10.4	K2	1	..	38411b	92	575	13.0	-60 32	9.1	10.0	K0	1	..	15147b
43	1370	12.8	+0 18	7.7	7.7	B9	4	..	37595i	93	835	13.1	+62 9	7.67	8.67	K0	4	0,3	37545i
44	1424	12.8	-13 41	9.9	9.9	A0	4	..	20581b	94	1287	13.1	+47 9	8.2	8.2	A0	3	..	37428i
45	1364	12.8	-22 40	6.04	7.7	G0	8	0,8	8904b	95	1533	13.1	+42 50	7.76	8.54	G5	2	..	37500i
46	3083	12.8	-25 28	8.9	9.0	F8	3	..	42904b	96	1561	13.1	+40 26	8.8	8.8	A0	1	..	37397i
47	600	12.8	-62 47	9.7	10.0	F0	2	..	15147b	97	1298	13.1	+23 0	8.6	8.7	A5	2	..	37446i
48	224	12.9	+78 2	7.8	8.6	G5	2	..	37343i	98	1295	13.1	+1 36	8.5	8.9	F5	2	..	37595i
49	878	12.9	+61 48	7.15	7.43	F0	7	..	37545i	99	1359	13.1	-7 32	9.1	9.1	A0	4	..	20894b
50	1059	12.9	+52 11	7.7	7.7	A0	5	..	37408i	100	1404	13.1	-9 57	8.26	8.26	A0	7	..	20581b

THE HENRY DRAPER CATALOGUE.

43800

6^h 13^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1335	13.1	-15 25	8.6	9.6	Ko	4	..	20581b	51	379	13.3	-77 1	9.5	10.6	K2	2	..	20652b
2	1334	13.1	-15 33	9.9	9.9	Ao	4	..	20581b	52	225	13.4	+78 21	8.08	9.15	K2	2	..	37343i
3	1410	13.1	-21 43	8.5	8.8	G5	4	..	12466b	53	237	13.4	+77 57	7.7	8.0	F2	3	..	37343i
4	3862	13.1	-24 2	6.84	7.7	G5	6	0,8	8904b	54	1420	13.4	+44 47	8.7	8.8	A2	2	..	37397i
5	2948	13.1	-29 16	9.5	9.2	A2	3	..	42904b	55	1241	13.4	+14 7	7.7	8.1	F5	5	..	37579i
6	2949	13.1	-29 50	7.8	8.9	F5	6	..	42904b	56	1191	13.4	+ 6 46	8.1	8.5	F5	4	..	38171i
7	1048	13.1	-53 58	9.9	10.2	Fo	1	..	20547b	57	1576	13.4	- 5 37	6.65	6.65	Ao	5	E	37595b
8	458	13.1	-72 8	9.1	10.3	K5	3	5,2	15167b	58	1461	13.4	-10 12	8.7	9.7	Ko	3	..	20581b
9	240	13.1	-77 23	9.8	10.8	Ko	2	..	20652b	59	1393	13.4	-14 11	9.1	9.1	Ao	5	..	20581b
10	328	13.2	+73 30	7.76	8.83	K2	3	..	37343i	60	1427	13.4	-16 42	8.9	10.0	K2	2	..	12630b
11	524	13.2	+65 31	9.9	10.9	K	1	..	37545i	61	1405	13.4	-19 9	6.57	6.6	B9	5	0,4	8916b
12	964	13.2	+59 24	6.02	6.08	A2	..	2,8-	56,82	62	1411	13.4	-21 43	9.0	9.1	G5	2	..	12466b
13	1112	13.2	+56 13	8.6	9.2	Go	2	..	37408i	63	3660	13.4	-23 30	8.5	8.3	A2	6	0,2	12466b
14	1481	13.2	+49 11	8.7	9.2	F8	2	..	37419i	64	3089	13.4	-25 58	8.5	8.7	Ao	5	..	42904b
15	1402	13.2	+36 15	8.7	9.1	F5	2	..	38126i	65	2993	13.4	-30 59	9.5	9.2	B9	4	..	42904b
16	1383	13.2	+35 5	9.12	9.12	Ao	2	..	38126i	66	2802	13.4	-35 50	8.7	8.8	Ko	3	..	20527b
17	1213	13.2	+25 44	8.8	9.6	G5	2	..	37440i	67	2255	13.4	-47 2	10.5	10.2	A	1	..	18483b
18	1300	13.2	+23 30	7.03	6.79	Bo	..	1,5	18353c	68	582	13.4	-69 12	8.2	8.2	Ao	4	0,2-	24561b
19	1203	13.2	+17 21	6.17	6.12	B8	6	1,7	38947i	69	241	13.4	-77 38	10.4	11.0	Go	2	..	20652b
20	1194	13.2	+13 48	8.5	8.5	Ao	4	..	37579i	70	1062	13.5	+52 34	8.5	9.9	Mb	2	..	37408i
21	1184	13.2	+ 9 6	6.38	7.38	Ko	8	..	38171i	71	1278	13.5	+22 52	8.6	8.6	Ao	3	..	37446i
22	1179	13.2	+ 5 39	8.7	9.9	K5	1	..	38411b	72	1371	13.5	+20 3	8.70	9.26	Go	2	..	37446i
23	1198	13.2	+ 4 33	7.7	8.0	F2	5	..	38171i	73	1105	13.5	+12 47	7.6	7.6	B8	8	..	37579i
24	1361	13.2	- 7 12	9.3	9.7	F5	3	..	20894b	74	1087	13.5	+10 29	8.9	8.9	Ao	3	..	38411b
25	1381	13.2	- 8 11	10.2	10.8	Go	2	..	20894b	75	1273	13.5	+ 8 2	8.9	10.0	K2	3	..	38411b
26	1391	13.2	-14 40	9.7	10.2	F8	2	..	20581b	76	1181	13.5	+ 5 42	8.9	8.9	Ao	2	..	38171i
27	1426	13.2	-16 46	5.28	6.28	Ko	..	2,6	56,82	77	1553	13.5	- 2 56	8.7	8.7	Ao	3	..	37595i
28	2889	13.2	-26 53	6.81	7.8	G5	8	..	42904b	78	1363	13.5	- 7 9	8.5	9.5	Ko	4	..	20894b
29	2858	13.2	-27 22	9.3	9.0	Ao	5	..	42904b	79	3871	13.5	-24 24	7.26	8.1	F5	8	..	42904b
30	2951	13.2	-29 18	8.5	9.5	K5	1	..	42904b	80	2770	13.5	-34 42	9.3	9.7	K5	1	..	20527b
31	2293	13.2	-46 59	9.4	9.6	G5	2	..	18483b	81	2493	13.5	-39 36	8.4	8.2	Ao	7	0,7	20527b
32	2148	13.2	-49 17	9.8	9.1	F2	1	..	20547b	82	888	13.5	-52 36	9.1	9.4	F2	2	..	20547b
33	1042	13.2	-56 10	8.7	8.7	B8	5	..	18484b	83	168	13.6	+82 36	8.6	9.2	Go	4	..	38330i
34	374	13.2	-74 43	5.14	6.14	Ko	..	R	56,122	84	240	13.6	+76 4	7.87	8.65	G5	3	..	37343i
35	1478	13.3	+37 13	8.5	8.5	Ao	3	2,3	38126i	85	1078	13.6	+28 28	7.16	7.24	A3	7	..	37440i
36	1301	13.3	+23 19	7.03	7.01	B9	4	0,R	37446i	86	1181	13.6	+26 43	9.1	9.1	Ao	2	..	37440i
37	1369	13.3	+20 37	8.4	8.2	B	1	..	37446i	87	1183	13.6	+ 5 31	8.9	9.7	G5	1	..	38411b
38	1368	13.3	+20 30	8.6	8.7	A5	3	..	37446i	88	1200	13.6	+ 4 36	8.7	9.2	F8	2	..	38171i
39	1171	13.3	+18 55	8.4	9.2	G5	2	..	37446i	89	1187	13.6	+ 2 31	9.3	9.3	B8	2	..	15138b
40	1103	13.3	+12 45	8.1	8.1	Ao	7	..	37579i	90	1554	13.6	- 2 27	8.6	8.7	A2	3	..	12682b
41	1110	13.3	+11 12	7.5	7.5	Ao	8	..	37579i	91	1463	13.6	-10 10	9.3	9.8	F8	3	..	20581b
42	1111	13.3	+11 6	8.8	8.8	A	2	..	38411b	92	1436	13.6	-12 29	9.3	9.7	F5	3	..	20581b
43	1487	13.3	- 6 42	6.89	7.89	Ko	7	..	12682b	93	1434	13.6	-12 56	9.1	9.7	Go	3	..	20581b
44	1488	13.3	- 6 47	9.1	9.9	G5	2	..	20894b	94	1395	13.6	-14 17	9.1	10.1	Ko	3	..	20581b
45	1404	13.3	-19 30	8.9	9.4	Ko	2	..	12630b	95	1434	13.6	-17 15	8.9	8.9	Ao	7	..	12630b
46	2773	13.3	-36 46	10.2	9.5	F5	1	..	20527b	96	2894	13.6	-26 40	9.0	9.0	F2	3	..	42904b
47	2491	13.3	-39 13	6.08	6.9	Ao	10	..	20555b	97	2960	13.6	-29 24	9.5	9.5	Ao	2	..	42904b
48	2356	13.3	-40 30	8.4	9.2	K2	3	..	20555b	98	2806	13.6	-35 55	8.0	7.4	A5	8	..	20527b
49	2310	13.3	-41 13	10.2	9.5	A	1	..	20555b	99	2707	13.6	-37 42	5.62	7.0	Ko	..	5,7	56,122
50	1000	13.3	-54 31	8.7	9.6	K2	2	..	20547b	100	2312	13.6	-41 29	9.0	9.5	G5	2	..	20555b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

43900

6^h 13^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2256	13.6	-47 47	8.2	7.8	Fo	7	..	20547b	51	1582	13.9	- 5 13	9.0	9.0	Ao	3	..	12682b
2	616	13.6	-59 41	9.3	10.3	Ko	1	..	15147b	52	1366	13.9	- 7 54	9.1	10.1	Ko	3	..	20894b
3	422	13.6	-71 48	9.4	9.8	F5	3	..	15167b	53	1438	13.9	-12 32	8.7	9.1	F5	6	..	20581b
4	440	13.7	+68 13	9.5	10.5	Ko	2	..	38155i	54	1396	13.9	-14 34	8.1	8.1	Ao	8	..	20581b
5	1008	13.7	+53 30	5.41	5.83	F5	10	..	37408i	55	1407	13.9	-19 56	5.31	5.14	B3	..	0,8	56,82
6	1215	13.7	+25 3	7.46	8.53	K2	3	..	37446i	56	891	13.9	-52 32	8.9	9.4	F8	2	..	20547b
7	1280	13.7	+22 9	8.8	8.8	B8	3	R	37446i	57	601	13.9	-62 14	8.1	8.6	F8	5	..	15147b
8	1088	13.7	+16 37	8.5	8.5	Ao	3	..	37579i	58	380	13.9	-76 14	9.7	10.3	Go	4	..	20652b
9	1195	13.7	+13 49	8.4	8.4	B9	2	..	37579i	59	329	14.0	+73 48	8.6	8.7	A2	3	..	37343i
10	1196	13.7	+13 2	7.7	7.7	B9	4	3,3	37579i	60	580	14.0	+64 57	8.40	8.82	F5	4	..	37545i
11	1239	13.7	+ 7 17	8.2	8.2	Ao	4	..	38171i	61	1114	14.0	+56 28	9.2	9.8	Go	3	..	37408i
12	1193	13.7	+ 6 8	8.1	8.1	Ao	5	..	38171i	62	1288	14.0	+45 9	8.77	9.95	Ma	..	R	M
13	1201	13.7	+ 4 13	7.5	7.5	Ao	6	..	38171i	63	1080	14.0	+28 7	8.7	9.7	Ko	1	..	37440i
14	1384	13.7	- 3 41	8.6	9.0	F5	4	..	20894b	64	1068	14.0	+27 40	8.8	8.8	Ao	2	..	37440i
15	1448	13.7	- 4 53	8.65	8.65	Ao	4	..	20894b	65	1206	14.0	+24 36	8.0	8.6	Go	4	..	37446i
16	2864	13.7	-28 52	9.5	10.1	Fo	2	..	42904b	66	1311	14.0	+23 27	8.2	8.2	B9	5	0, R	37446i
17	2780	13.7	-36 2	9.4	9.5	Ao	2	..	20527b	67	1189	14.0	+ 5 52	9.3	9.4	A5	2	..	38411b
18	2143	13.7	-50 56	9.1	9.2	Ko	2	..	20547b	68	1385	14.0	- 3 12	9.5	10.5	Ko	2	E	20894b
19	973	13.7	-57 1	9.0	9.6	G	1	..	18484b	69	1385	14.0	- 8 52	8.7	9.8	K2	4	..	20894b
20	571	13.7	-65 29	8.6	9.6	Ko	2	..	18485b	70	1467	14.0	-10 20	9.0	9.5	F8	5	..	20581b
21	504	13.7	-66 38	7.6	8.0	F5	4	3,8	9062b	71	1397	14.0	-14 19	8.6	8.6	Ao	8	..	20581b
22	583	13.7	-69 46	10.0	11.0	K	1	..	15167b	72	1338	14.0	-15 20	9.3	9.8	F8	3	..	20581b
23	213	13.7	-79 14	9.8	10.9	K2	3	..	20652b	73	1374	14.0	-18 23	8.3	8.7	F5	4	..	12630b
24	959	13.8	+57 27	8.6	9.7	K2	3	..	37408i	74	2998	14.0	-30 58	7.51	8.9	Ko	7	..	42904b
25	1595	13.8	+39 23	8.2	9.2	Ko	2	..	37397i	75	2711	14.0	-37 49	9.4	8.9	F2	4	..	20527b
26	1196	13.8	+30 25	7.86	8.14	Fo	5	..	38126i	76	974	14.0	-57 40	8.4	9.0	G5	4	..	18484b
27	1066	13.8	+27 25	8.4	8.4	Ao	4	..	37440i	77	537	14.0	-63 16	9.4	10.4	Ko	1	..	15147b
28	1196	13.8	+21 31	8.8	9.4	Go	3	..	37446i	78	314	14.1	+72 38	8.9	8.9	Ao	2	..	37343i
29	1089	13.8	+16 13	7.9	8.2	F2	4	..	37579i	79	1115	14.1	+56 2	7.8	8.1	Fo	7	..	37408i
30	1200	13.8	+13 30	7.76	8.54	G5	1	..	37579i	80	1406	14.1	+36 37	8.4	8.4	Ao	2	..	38126i
31	1199	13.8	+13 29	6.96	7.38	F5	6	..	37579i	81	1070	14.1	+27 40	8.6	9.6	Ko	1	..	37440i
32	1089	13.8	+10 46	8.9	8.9	Ao	4	..	38411b	82	1069	14.1	+27 19	9.4	9.4	Ao	2	..	37440i
33	1556	13.8	- 2 58	8.7	9.5	G5	5	E	20894b	83	1110	14.1	+12 20	7.7	7.7	B8	6	..	37579i
34	1365	13.8	- 7 48	8.9	10.0	K2	4	..	20894b	84	1118	14.1	+11 3	8.3	8.3	B8	3	..	37579i
35	1437	13.8	-12 4	9.1	9.4	F2	4	..	20581b	85	1188	14.1	+ 9 3	8.7	8.8	A3	2	..	38171i
36	1433	13.8	-13 12	9.3	9.4	A5	2	..	20581b	86	1196	14.1	+ 6 53	9.1	10.1	Ko	1	..	38411b
37	1429	13.8	-16 48	9.5	9.5	Ao	2	..	12630b	87	1190	14.1	+ 5 8	8.31	9.09	G5	3	..	38171i
38	1373	13.8	-18 32	9.1	9.2	A5	2	..	12630b	88	1188	14.1	- 1 20	7.6	8.6	Ko	2	..	37595i
39	2862	13.8	-33 39	8.4	8.0	A5	7	..	20527b	89	1386	14.1	- 3 24	8.5	9.1	Go	7	..	20894b
40	2708	13.8	-37 12	6.00	6.2	A2	..	0,8	56,122	90	1387	14.1	- 3 42	7.9	7.9	Ao	3	..	37595i
41	2346	13.8	-43 36	7.2	7.3	B9	4	1,10	42923b	91	1451	14.1	- 4 8	9.1	9.2	A2	3	..	20894b
42	505	13.8	-66 9	8.2	9.0	G5	5	..	18485b	92	1368	14.1	- 7 5	10.2	10.3	A3	2	..	20894b
43	399	13.9	+70 6	9.19	10.19	Ko	2	..	38169i	93	1411	14.1	- 9 21	5.67	6.67	Ko	5	..	2345b
44	1019	13.9	+54 42	8.6	9.4	G5	2	..	37408i	94	1468	14.1	-10 14	9.1	9.2	A2	4	..	20581b
45	1180	13.9	+29 32	9.0	9.0	A	1	..	37440i	95	1444	14.1	-11 33	9.1	9.1	Ao	4	..	20581b
46	1309	13.9	+23 19	9.5	9.5	Ao	2	..	37440i	96	1439	14.1	-12 39	8.9	9.3	F5	5	..	20581b
47	1091	13.9	+16 3	6.53	7.09	Go	7	..	37579i	97	1398	14.1	-14 53	9.11	10.11	Ko	2	..	20581b
48	1108	13.9	+12 31	8.7	8.7	Ao	2	..	37579i	98	2553	14.1	-38 32	8.4	8.8	F2	5	..	20527b
49	1252	13.9	- 0 37	9.1	9.1	Ao	2	..	12682b	99	892	14.1	-52 22	8.5	8.9	Ko	3	..	20547b
50	1581	13.9	- 5 1	7.85	7.99	A5	5	..	12682b	100	1051	14.1	-53 15	9.9	10.2	F2	2	..	20547b

THE HENRY DRAPER CATALOGUE.

44000

6^h 14^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1006	14.1	-54 38	8.5	9.0	F2	4	..	20547b	51	1194	14.5	+ 5 48	9.6	9.7	A3	2	..	38411b
2	441	14.2	+66 34	8.6	8.9	Fo	5	..	37545i	52	1207	14.5	+ 4 41	8.3	8.3	B8	6	..	38171i
3	953	14.2	+60 28	9.2	9.8	Go	2	..	38239i	53	1387	14.5	- 8 37	9.1	9.1	Ao	3	..	20894b
4	1536	14.2	+42 23	6.74	6.74	Ao	6	0.8	37428i	54	1447	14.5	-11 49	9.7	10.3	Go	2	..	20581b
5	1407	14.2	+36 22	7.8	8.8	Ko	2	..	38126i	55	1446	14.5	-11 53	9.3	9.4	A2	3	..	20581b
6	1254	14.2	- 0 15	8.7	9.2	F8	1	..	12682b	56	1438	14.5	-13 35	9.5	10.3	G5	1	..	20581b
7	1399	14.2	-14 48	8.3	9.1	G5	6	..	20581b	57	2872	14.5	-33 15	8.4	8.3	F5	5	5.3	20527b
8	2868	14.2	-27 11	9.2	9.0	F5	4	..	42904b	58	2372	14.5	-40 37	7.5	7.9	Ao	8	..	20555b
9	2970	14.2	-29 36	9.3	9.2	Go	2	..	42904b	59	617	14.5	-59 8	8.5	8.8	A2	5	..	15147b
10	2972	14.2	-29 48	8.5	9.6	K2	2	..	42904b	60	240	14.6	+77 20	8.8	9.3	F8	4	..	37343i
11	2299	14.2	-47 0	9.6	9.3	F	2	R	18483b	61	963	14.6	+57 1	6.68	7.68	Ko	6	..	37408i
12	1832	14.2	-51 12	10.0	9.1	Ao	2	..	20547b	62	1374	14.6	+48 53	9.4	9.7	F	2	..	37500i
13	580	14.2	-60 37	8.4	10.1	Ko	2	..	15147b	63	1187	14.6	+26 32	9.1	9.5	F5	1	..	37440i
14	602	14.2	-62 16	9.7	10.0	F2	2	..	15147b	64	1199	14.6	+21 8	8.0	9.0	Ko	3	..	37446i
15	1486	14.3	+37 59	7.8	8.8	Ko	2	..	37397i	65	1200	14.6	+ 6 21	9.6	9.7	A2	1	..	38411b
16	1271	14.3	+31 41	7.7	8.1	F5	3	..	38126i	66	1491	14.6	- 6 25	9.1	9.1	Ao	5	..	20894b
17	1185	14.3	+26 37	8.4	8.4	Ao	3	..	37440i	67	1415	14.6	- 9 28	10.3	10.4	A2	2	..	20894b
18	1305	14.3	+19 55	7.68	8.46	G5	3	..	37446i	68	2303	14.6	-46 21	9.8	9.5	Ao	2	..	18483b
19	1255	14.3	- 0 53	7.6	8.6	Ko	5	0.3	12671b	69	615	14.6	-61 16	9.7	9.7	Ao	3	..	15147b
20	1440	14.3	-12 24	9.5	9.6	A2	4	..	20581b	70	1021	14.7	+54 7	9.2	10.3	K2	1	..	37419i
21	1400	14.3	-14 59	6.28	7.46	K5	6	..	12630b	71	1189	14.7	+29 25	6.91	7.19	Fo	5	..	38126i
22	1432	14.3	-16 24	8.7	8.8	A3	7	..	12630b	72	1226	14.7	+25 45	8.8	9.6	G5	1	..	37440i
23	3893	14.3	-24 17	8.5	9.0	G5	3	..	12466b	73	1178	14.7	+18 5	7.6	8.6	Ko	2	..	37446i
24	2268	14.3	-47 37	8.5	10.4	K5	1	..	18483b	74	1115	14.7	+12 1	8.9	8.9	A	2	R	37579i
25	2267	14.3	-47 42	8.4	10.4	K5	2	..	18483b	75	1241	14.7	+ 7 13	8.9	10.0	K2	1	..	38411b
26	603	14.3	-62 21	8.9	10.0	K2	3	..	15147b	76	1192	14.7	- 1 10	8.3	8.3	Ao	3	..	12682b
27	242	14.3	-77 54	10.3	11.3	Ko	2	..	20652b	77	1586	14.7	- 5 42	9.3	9.9	Go	2	..	20894b
28	239	14.4	+77 3	8.5	9.0	F8	3	..	37343i	78	1416	14.7	- 9 15	8.7	8.8	A3	6	..	20894b
29	1289	14.4	+45 40	7.37	8.37	Ko	3	..	37428i	79	1417	14.7	- 9 45	9.1	10.1	Ko	2	..	20894b
30	1223	14.4	+25 39	7.9	9.1	K5	2	..	37440i	80	1442	14.7	-12 29	7.9	7.9	B9	10	..	20581b
31	1286	14.4	+22 28	8.7	9.5	G5	1	..	37446i	81	1355	14.7	-20 53	5.66	5.5	B5	..	3.6-	56,82
32	1377	14.4	+20 35	9.0	9.0	Ao	2	..	37446i	82	1418	14.7	-22 0	8.0	7.3	Ao	5	0.7	8904b
33	1247	14.4	+14 41	6.02	7.20	K5	7	0.6	37568i	83	2910	14.7	-26 17	8.9	9.3	G5	2	..	42904b
34	1246	14.4	+14 17	9.1	9.4	F	1	R	37579i	84	2889	14.7	-28 8	9.3	9.6	F	2	..	42904b
35	1191	14.4	- 1 40	8.9	8.9	A	2	..	12682b	85	2890	14.7	-28 18	10.0	9.3	F5	2	..	42904b
36	1584	14.4	- 5 10	9.10	9.16	A2	4	..	20894b	86	2983	14.7	-29 15	9.7	9.5	A	2	R	42904b
37	1386	14.4	- 8 32	6.07	6.05	B9	..	0.6	56,82	87	2985	14.7	-29 19	8.9	8.9	A2	3	..	10682b
38	1412	14.4	- 9 20	9.7	9.7	Ao	3	..	20894b	88	2447	14.7	-42 57	9.1	9.2	Fo	2	..	20555b
39	1441	14.4	-12 30	9.1	9.1	B9	5	..	20581b	89	2270	14.7	-47 11	10.0	9.8	Ao	2	..	18483b
40	1342	14.4	-15 22	9.1	10.5	Ma	2	..	20581b	90	1375	14.8	+48 33	9.4	9.7	F	2	..	37500i
41	1376	14.4	-18 39	9.3	10.3	Ko	1	..	12630b	91	1426	14.8	+44 7	7.04	7.82	G5	6	5.4	37500i
42	3897	14.4	-24 15	8.7	9.0	G5	2	..	12466b	92	1190	14.8	+29 35	6.27	6.27	Ao	9	..	38126i
43	2870	14.4	-27 1	8.9	9.6	Ko	1	..	42904b	93	1209	14.8	+ 4 57	9.1	9.2	A2	3	..	38171i
44	975	14.4	-57 59	8.7	9.9	K5	2	..	18484b	94	1193	14.8	- 1 2	9.1	9.2	A3	2	..	12671b
45	525	14.4	-64 21	8.4	8.4	Ao	4	..	18485b	95	1457	14.8	- 4 28	8.9	8.9	Ao	4	..	20894b
46	459	14.4	-72 47	9.1	9.5	F5	3	..	24561b	96	1588	14.8	- 5 15	9.1	10.5	Ma	2	..	20894b
47	962	14.5	+57 7	9.2	10.0	G5	2	..	37408i	97	1419	14.8	- 9 21	8.5	8.5	Ao	6	..	20894b
48	1272	14.5	+31 22	9.0	9.0	Ao	1	..	38126i	98	1472	14.8	-10 12	8.9	9.2	Fo	5	..	20581b
49	1187	14.5	+29 37	9.1	9.2	A2	2	..	37440i	99	1443	14.8	-12 31	10.2	10.2	A	1	..	20581b
50	1225	14.5	+25 14	7.16	7.14	B9	7	R	37440i	100	1437	14.8	-16 18	9.1	9.1	Ao	5	..	12630b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

44100

6^h 14^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1411	14.8	-19 36	9.9	9.7	A	1	..	12630b	51	1202	15.2	+21 11	9.5	9.5	Ao	2	..	37446i
2	3906	14.8	-24 58	7.06	7.4	B9	7	..	8904b	52	1308	15.2	+19 58	8.33	9.11	G5	2	..	37446i
3	3101	14.8	-25 43	9.2	9.3	Ao	3	..	42904b	53	1246	15.2	+7 37	8.3	8.6	Fo	2	..	3817ri
4	1007	14.8	-54 35	7.1	8.7	K2	6	..	20547b	54	1591	15.2	-5 33	9.1	9.2	A5	4	..	20894b
5	618	14.8	-59 11	7.9	8.5	F8	7	..	15147b	55	1498	15.2	-6 34	9.7	10.3	Go	1	..	20894b
6	538	14.8	-63 24	9.5	9.6	A5	3	R	15147b	56	1376	15.2	-7 43	9.1	9.9	G5	4	..	20894b
7	1264	14.9	+32 27	8.6	8.7	A2	3	..	38126i	57	1420	15.2	-9 32	9.3	9.9	Go	2	..	20894b
8	1212	14.9	+24 2	8.6	9.2	Go	3	..	37446i	58	1413	15.2	-19 27	9.1	9.1	G5	3	..	12630b
9	1243	14.9	+7 45	6.69	6.67	B9	7	..	3817ri	59	1378	15.2	-22 18	8.7	8.2	A2	4	0,2	12466b
10	1495	14.9	-6 46	8.9	9.9	Ko	3	..	20894b	60	2880	15.2	-27 9	8.3	8.5	B9	6	..	42904b
11	1371	14.9	-7 40	9.0	10.0	Ko	2	..	20894b	61	2900	15.2	-28 16	9.2	9.3	Ao	4	..	42904b
12	1373	14.9	-7 47	5.13	4.96	B3	..	2,7	56,82	62	2898	15.2	-28 55	9.3	9.6	Ko	2	..	42904b
13	1449	14.9	-11 1	9.0	9.0	Ao	4	..	20581b	63	2569	15.2	-38 51	7.31	8.2	Ko	6	0,6	20555b
14	1402	14.9	-14 18	9.3	9.4	A2	4	..	20581b	64	979	15.2	-55 23	7.2	7.6	B8	8	..	18484b
15	1403	14.9	-14 37	9.0	9.1	A2	4	..	20581b	65	368	15.2	-75 4	7.43	8.2	G5	7	..	20652b
16	3696	14.9	-23 31	8.0	8.5	Ko	3	..	12466b	66	1296	15.3	+50 27	9.2	10.4	K5	1	..	37419i
17	2988	14.9	-29 24	8.7	8.9	A5	5	..	42904b	67	1518	15.3	+43 34	8.8	9.6	G5	1	..	37397i
18	2784	14.9	-34 33	10.0	9.1	Ao	3	..	20527b	68	1387	15.3	+35 16	8.1	8.4	Fo	4	..	38126i
19	2715	14.9	-37 39	9.4	10.5	A5	2	..	20527b	69	1275	15.3	+31 3	9.0	10.0	K	1	..	38126i
20	619	14.9	-59 9	6.42	7.7	Go	7	..	18484b	70	1209	15.3	+30 26	8.1	8.9	G5	2	..	38126i
21	617	14.9	-61 34	8.7	9.8	Ko	3	..	15147b	71	1203	15.3	+21 11	7.14	7.09	B8	6	..	37446i
22	376	14.9	-74 29	9.0	9.8	G5	3	..	20652b	72	1254	15.3	+14 45	7.29	7.17	B5	5	0,7	38947i
23	964	15.0	+57 24	8.0	9.0	Ko	3	..	37408i	73	1128	15.3	+11 47	6.43	6.31	B5	8	..	37579i
24	1135	15.0	+46 13	7.26	7.32	A2	6	..	37428i	74	1197	15.3	+9 0	8.3	8.3	Ao	4	..	3817ri
25	1429	15.0	+44 27	7.66	7.80	A5	7	2,4	37500i	75	1199	15.3	-1 15	8.1	8.1	Ao	2	..	37595i
26	1265	15.0	+32 47	8.6	8.6	Ao	3	..	38126i	76	1198	15.3	-2 1	7.62	7.62	Ao	4	..	37595i
27	1191	15.0	+26 28	9.4	9.4	A	1	R	37440i	77	1593	15.3	-5 33	9.7	9.7	Ao	3	..	20894b
28	1159	15.0	+15 45	8.7	8.8	A3	1	..	38947i	78	1378	15.3	-7 49	6.91	7.05	A5	..	..	56,82
29	1245	15.0	+7 43	9.6	9.7	A2	2	..	38411b	79	1476	15.3	-10 36	8.5	8.5	B8	4	..	20581b
30	1211	15.0	+4 26	8.9	8.9	Ao	2	..	3817ri	80	1346	15.3	-15 2	8.61	9.61	Ko	3	..	20581b
31	1564	15.0	-2 54	5.18	6.53	Ma	7	..	37595i	81	1347	15.3	-15 31	9.7	9.8	A2	3	..	20581b
32	1590	15.0	-5 7	8.95	10.02	K2	2	..	20894b	82	1446	15.3	-17 29	7.25	7.20	B8	4	1,3	42141b
33	1390	15.0	-8 14	8.3	8.4	A2	7	..	20894b	83	2902	15.3	-28 59	7.9	9.6	K5	2	..	42904b
34	1441	15.0	-13 38	9.3	10.1	G5	2	..	20581b	84	2825	15.3	-35 52	7.95	8.5	K2	5	..	20527b
35	2897	15.0	-28 5	7.9	8.7	Go	6	..	42904b	85	2367	15.3	-43 51	9.0	9.9	Go	1	..	20555b
36	2878	15.0	-33 33	8.7	8.9	F5	1	..	10682b	86	1008	15.3	-54 4	9.0	9.9	G5	2	..	20547b
37	567	15.0	-67 37	10.0	10.3	F	2	..	18485b	87	214	15.3	-79 42	9.4	9.4	Ao	6	..	20557b
38	1274	15.1	+31 12	9.1	9.2	A5	1	..	38126i	88	1024	15.4	+53 59	9.0	9.3	Fo	2	..	37419i
39	1291	15.1	+22 13	8.8	8.8	B9	2	..	37446i	89	1011	15.4	+53 6	7.63	7.63	Ao	7	..	37419i
40	1375	15.1	-7 12	8.3	8.3	B9	9	..	20894b	90	1576	15.4	+40 33	8.0	8.1	A5	3	..	37397i
41	1391	15.1	-8 1	9.1	9.6	F8	4	..	20894b	91	1577	15.4	+40 6	9.12	9.54	F5	1	..	37397i
42	1451	15.1	-11 57	9.3	9.7	F5	3	..	20581b	92	1327	15.4	+34 39	7.47	7.97	F8	5	..	38126i
43	1443	15.1	-13 31	8.5	8.6	A2	7	..	20581b	93	1204	15.4	+21 15	7.7	7.7	Ao	5	..	37446i
44	3915	15.1	-24 55	7.4	7.5	Ao	6	R	8904b	94	1247	15.4	+7 31	8.3	8.3	Ao	2	..	3817ri
45	2421	15.1	-45 57	10.2	9.9	Ao	1	..	18483b	95	1197	15.4	+5 19	8.1	8.4	Fo	6	..	3817ri
46	2273	15.1	-47 20	8.6	9.8	K5	2	..	18483b	96	1216	15.4	+4 59	8.66	9.44	G5	2	..	3817ri
47	2165	15.1	-49 47	10.5	9.7	Ao	2	..	20547b	97	1215	15.4	+4 0	9.1	9.2	A5	2	..	3817ri
48	243	15.1	-77 5	6.89	7.2	Ao	10	..	20652b	98	1499	15.4	-6 46	9.9	9.9	A	1	..	20894b
49	244	15.1	-77 27	10.2	10.6	F5	2	..	20652b	99	1392	15.4	-8 48	8.1	9.1	Ko	7	..	20894b
50	955	15.2	+60 8	7.26	8.26	Ko	4	0,4	37545i	100	1450	15.4	-13 57	6.58	6.58	Ao	7	..	42141b

THE HENRY DRAPER CATALOGUE.

44200

6^h 15^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1415	15.4	-19 42	9.5	9.1	A5	2	..	12630b	51	1322	15.7	+23 49	7.7	8.7	Ko	3	..	37446i
2	2828	15.4	-35 34	10.0	10.0	Ko	1	..	20527b	52	1294	15.7	+22 57	8.1	8.5	F5	3	..	37446i
3	2800	15.4	-36 17	8.7	8.9	A5	3	..	20527b	53	1313	15.7	+19 56	7.30	8.08	G5	4	..	37446i
4	2366	15.4	-43 39	8.8	9.8	K2	2	..	20555b	54	1117	15.7	+12 26	8.9	8.9	A	2	..	37579i
5	2169	15.4	-49 23	8.0	8.0	F2	6	..	20547b	55	1310	15.7	+ 1 13	9.3	9.3	Ao	1	..	15138b
6	1843	15.4	-51 25	8.2	7.7	A3	9	..	20547b	56	1390	15.7	+ 0 47	8.3	9.4	K2	4	0.4	12682b
7	245	15.4	-77 31	10.3	10.6	Fo	4	..	20652b	57	1597	15.7	- 5 57	9.1	9.1	Ao	3	..	12682b
8	331	15.5	+73 37	8.6	9.7	K2	1	..	37343i	58	1483	15.7	-10 23	8.7	8.8	A2	7	..	20581b
9	1184	15.5	+51 36	8.2	8.3	A5	3	..	37419i	59	1484	15.7	-10 24	9.5	9.5	A	2	..	20581b
10	1297	15.5	+50 49	7.9	8.9	Ko	3	..	37419i	60	1452	15.7	-13 12	9.3	10.1	G5	3	..	20581b
11	1232	15.5	+25 3	8.61	9.39	G5	1	..	37440i	61	1359	15.7	-20 29	8.5	8.2	B9	8	1,2	12630b
12	1199	15.5	+ 9 47	8.5	9.6	K2	2	..	38411b	62	3922	15.7	-24 5	10.2	9.3	A2	2	..	12466b
13	1198	15.5	+ 5 47	8.1	9.5	Ma	1	..	38411b	63	3123	15.7	-25 22	7.9	9.1	Ko	3	..	42904b
14	..	15.5	+ 5 47	..	..	A	1	R	38411b	64	2922	15.7	-26 56	7.38	8.7	K2	6	..	42904b
15	1201	15.5	- 1 19	8.1	8.1	Ao	3	..	37595i	65	2804	15.7	-36 29	8.0	8.0	F2	7	..	20527b
16	1461	15.5	- 4 13	9.1	10.1	K	1	..	20894b	66	2372	15.7	-43 54	8.9	9.8	G5	1	..	20555b
17	1595	15.5	- 5 10	9.7	9.7	Ao	4	..	20894b	67	902	15.7	-52 42	6.08	7.5	Ko	9	..	20547b
18	1594	15.5	- 5 54	8.5	9.3	G5	3	..	12682b	68	661	15.7	-58 8	8.2	8.8	F5	4	0,3	18484b
19	1479	15.5	-10 41	7.9	8.7	G5	7	..	20581b	69	500	15.7	-70 8	10.0	10.1	A2	4	..	15167b
20	1445	15.5	-12 2	9.7	9.7	B9	5	..	20581b	70	525	15.8	+65 31	9.2	9.3	A2	3	..	37545i
21	1406	15.5	-14 13	10.6	10.6	Ao	2	..	20581b	71	969	15.8	+59 42	8.0	9.0	Ko	3	..	37408i
22	1379	15.5	-18 23	8.9	9.3	F5	3	..	12630b	72	1013	15.8	+53 17	8.2	9.4	K5	1	..	37419i
23	1378	15.5	-18 31	9.5	9.5	A	1	..	12630b	73	1314	15.8	+19 39	8.5	8.5	Ao	2	..	37446i
24	1416	15.5	-19 14	9.1	8.8	Ao	4	0,3	12630b	74	1196	15.8	+ 2 37	7.5	8.9	Mb	2	..	37595i
25	1379	15.5	-22 3	6.53	8.2	K2	5	0,7	8904b	75	1504	15.8	- 6 17	9.1	9.9	G5	3	..	20894b
26	3118	15.5	-25 18	9.3	9.1	A5	3	..	42904b	76	1422	15.8	- 9 14	9.9	9.9	Ao	1	..	20581b
27	2159	15.5	-50 29	9.0	9.1	Ko	2	..	20547b	77	2280	15.8	-48 0	7.3	8.3	K5	4	..	20547b
28	1844	15.5	-51 14	8.6	8.2	A2	6	..	20547b	78	662	15.8	-58 21	8.2	9.4	F8	3	..	15147b
29	968	15.6	+59 46	7.41	7.49	A3	5	R	37408i	79	509	15.8	-66 43	9.0	9.1	A2	4	..	18485b
30	967	15.6	+59 37	8.5	8.9	F5	4	..	38239i	80	201	15.9	+79 32	8.01	8.57	Go	4	5,4	37558i
31	1210	15.6	+30 53	9.8	10.6	G5	1	..	38126i	81	1522	15.9	+43 17	7.81	7.81	Ao	3	0,3	37428i
32	1082	15.6	+27 33	9.4	9.8	F5	2	..	37440i	82	1252	15.9	+ 6 59	8.8	9.8	Ko	1	..	38171i
33	1079	15.6	+27 1	10.0	10.0	A	1	..	37440i	83	1207	15.9	+ 6 49	9.1	10.1	Ko	1	..	38171i
34	1214	15.6	+17 49	6.46	7.46	Ko	4	..	37446i	84	1204	15.9	+ 3 11	8.5	9.1	Go	2	..	38205i
35	1200	15.6	+ 9 49	8.5	8.5	B8	3	E	38200i	85	1392	15.9	+ 0 17	8.3	9.4	K2	2	..	12682b
36	1249	15.6	+ 7 35	7.9	8.0	A2	5	..	38171i	86	1467	15.9	- 4 33	6.58	6.72	A5	6	3,10	37595i
37	1199	15.6	+ 5 50	9.6	9.7	A2	1	..	38411b	87	1506	15.9	- 6 33	9.9	10.3	F5	2	..	20894b
38	1308	15.6	+ 1 55	9.3	9.4	A2	2	..	15138b	88	1423	15.9	- 9 51	7.01	7.07	A2	9	..	20581b
39	1309	15.6	+ 1 9	9.3	9.3	Ao	2	..	15138b	89	1485	15.9	-10 3	8.68	8.68	Ao	5	..	20581b
40	1389	15.6	+ 0 54	9.1	9.1	A	2	..	12682b	90	1409	15.9	-14 9	8.5	8.5	B9	6	..	20581b
41	1481	15.6	-10 50	7.22	7.28	A2	9	..	20581b	91	3718	15.9	-23 4	7.8	7.9	A5	7	0,4	12466b
42	1449	15.6	-17 39	7.9	8.0	A2	4	..	12630b	92	3716	15.9	-23 44	8.7	8.8	K2	3	..	12466b
43	1381	15.6	-22 38	9.0	9.1	Ko	1	..	12466b	93	2324	15.9	-41 2	7.4	7.2	Ao	8	..	20555b
44	2383	15.6	-40 16	9.0	9.1	A2	4	..	20555b	94	2325	15.9	-41 45	8.4	8.2	A2	6	..	20555b
45	2242	15.6	-48 40	8.4	8.8	K5	1	..	20547b	95	1056	15.9	-53 32	6.78	7.1	Ao	10	..	20547b
46	1055	15.6	-53 57	7.0	8.0	Ko	8	..	20547b	96	526	16.0	+65 56	9.5	10.1	G	2	..	37545i
47	507	15.6	-66 16	7.4	7.4	B9	5	0,8	9062b	97	1521	16.0	+43 45	8.0	8.4	F5	3	0,2	37397i
48	1072	15.7	+55 13	9.4	9.8	F5	2	..	37408i	98	1329	16.0	+34 43	9.0	9.1	A3	2	..	38126i
49	1543	15.7	+42 57	7.7	7.7	B9	4	3,3	37500i	99	1268	16.0	+32 49	8.0	8.4	F5	4	..	38126i
50	1211	15.7	+30 1	7.06	7.06	Ao	8	..	38126i	100	1278	16.0	+31 0	7.8	8.1	Fo	4	..	38126i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

44300

6^h 16^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1296	16.0	+22 36	9.0	9.0	B9	2	..	37446i	51	1258	16.3	+14 21	8.5	8.5	A	2	R	37579i
2	1220	16.0	+4 1	9.3	9.4	A2	2	..	38171i	52	1254	16.3	+7 14	8.9	9.3	F5	3	..	38171i
3	1397	16.0	-3 27	7.9	8.2	F2	4	..	12682b	53	1212	16.3	+6 17	9.3	9.3	Ao	3	..	38411b
4	1395	16.0	-3 43	9.3	9.9	G	3	..	20894b	54	1207	16.3	-1 11	7.7	7.7	B9	5	..	12682b
5	1396	16.0	-3 57	9.1	9.1	Ao	4	..	20894b	55	1429	16.3	-9 4	9.3	10.3	Ko	4	..	20894b
6	1440	16.0	-16 5	9.5	9.5	A	1	..	12630b	56	1489	16.3	-10 33	9.1	10.2	K2	2	..	20581b
7	1450	16.0	-17 14	8.5	9.5	Ko	1	..	39861b	57	1457	16.3	-11 48	9.0	9.1	A2	6	..	20581b
8	2928	16.0	-26 18	9.3	8.7	B9	4	..	42904b	58	1362	16.3	-20 38	8.9	9.1	K5	3	3,2	12630b
9	2809	16.0	-36 26	9.4	10.0	K2	2	..	20527b	59	2934	16.3	-26 33	10.0	9.6	Ao	2	..	42904b
10	2733	16.0	-37 25	8.7	8.8	Ko	3	..	20527b	60	2839	16.3	-35 31	8.7	9.1	Ko	3	..	20527b
11	2374	16.0	-43 33	8.6	8.9	Ao	4	..	20555b	61	2458	16.3	-42 27	8.6	8.8	F8	5	..	20555b
12	501	16.0	-70 34	9.4	10.0	Go	4	..	15167b	62	2169	16.3	-50 19	6.88	6.9	G5	8	..	20547b
13	176	16.0	-81 58	8.28	8.5	Ao	8	..	20557b	63	1011	16.3	-54 22	8.4	9.6	Ma	3	..	20547b
14	332	16.1	+73 41	9.4	9.5	A2	2	..	37343i	64	1050	16.3	-56 25	8.1	8.2	Fo	7	..	18484b
15	1412	16.1	+36 7	8.7	9.5	G5	1	..	38126i	65	369	16.3	-75 45	9.3	10.3	Ko	2	..	20652b
16	1094	16.1	+28 57	7.7	8.7	Ko	2	..	37440i	66	247	16.3	-77 29	9.6	9.7	A5	8	..	20652b
17	1095	16.1	+28 10	9.0	9.0	Ao	2	..	37440i	67	..	16.3	-77 56	..	..	K5	1	..	20652b
18	1119	16.1	+12 55	6.87	7.65	G5	6	..	37579i	68	1120	16.4	+56 28	8.9	10.0	K2	2	..	37408i
19	1286	16.1	+8 45	8.1	9.1	Ko	3	0,2	38168i	69	1416	16.4	+36 7	9.5	9.9	F5	1	..	38126i
20	1208	16.1	+6 31	var.	var.	G5	3	R	38411b	70	1300	16.4	+22 2	9.0	9.0	Ao	2	..	37446i
21	1507	16.1	-6 39	8.1	8.1	B9	9	..	20894b	71	1390	16.4	+20 56	9.4	9.4	Ao	3	..	37446i
22	1441	16.1	-16 6	9.5	9.5	Ao	2	..	12630b	72	1318	16.4	+19 45	7.7	7.8	A2	5	..	37446i
23	2795	16.1	-34 22	5.83	5.8	B8	..	1,7	28,198	73	1138	16.4	+11 1	8.2	8.2	B8	3	..	37579i
24	2431	16.1	-45 51	9.1	9.5	Ko	1	..	18483b	74	1199	16.4	+2 27	8.9	8.9	Ao	3	0,2-	15138b
25	664	16.1	-58 29	8.2	9.8	Ko	3	..	15147b	75	1264	16.4	-0 52	9.6	10.0	F5	2	..	12671b
26	502	16.1	-70 26	9.5	10.5	Ko	2	..	15167b	76	1601	16.4	-6 0	9.3	9.3	Ao	7	..	20894b
27	175	16.1	-81 3	7.30	7.5	Fo	9	..	20557b	77	1511	16.4	-6 44	9.1	9.9	G5	2	..	20894b
28	1201	16.2	+26 44	8.4	8.4	Ao	5	..	37440i	78	1458	16.4	-11 38	8.9	10.1	K5	3	..	20581b
29	1236	16.2	+25 37	8.6	8.6	B9	2	..	37440i	79	3729	16.4	-23 36	6.59	8.0	Ko	5	0,8	8904b
30	1208	16.2	+21 3	9.4	9.5	A2	2	..	37446i	80	3008	16.4	-29 59	7.80	8.9	Ko	3	..	42904b
31	1287	16.2	+8 51	8.8	8.9	A2	2	..	38168i	81	2739	16.4	-37 1	9.0	10.3	K2	1	..	20527b
32	1203	16.2	+5 31	8.9	9.0	A5	3	..	38171i	82	1057	16.4	-53 36	7.3	8.1	Ko	7	..	20547b
33	1197	16.2	+2 19	6.25	6.39	A5	6	..	37595i	83	666	16.4	-58 47	8.5	8.9	F5	3	..	15147b
34	1205	16.2	-1 20	8.7	9.8	K2	2	..	12671b	84	586	16.4	-60 27	9.1	10.3	Ko	2	..	15147b
35	1470	16.2	-4 18	7.9	7.9	Ao	8	..	20894b	85	202	16.5	+79 3	6.69	7.69	Ko	6	5,5	37343i
36	1599	16.2	-5 54	9.1	9.2	A3	6	..	20894b	86	1185	16.5	+51 8	7.27	8.45	K5	3	..	37500i
37	1508	16.2	-6 2	9.1	9.2	A5	6	..	20894b	87	1380	16.5	+48 43	9.0	9.0	A	1	..	37438i
38	1396	16.2	-8 6	9.0	9.1	A2	4	..	20894b	88	1291a	16.5	+47 45	var.	var.	Nb	..	R	M
39	1488	16.2	-10 30	9.1	9.7	G	2	..	20581b	89	1475	16.5	+38 5	7.8	8.8	Ko	3	..	38126i
40	1454	16.2	-13 47	9.1	9.4	Fo	4	..	20581b	90	1392	16.5	+35 35	7.29	7.29	Ao	8	..	38126i
41	1353	16.2	-15 52	8.5	8.9	F5	3	..	12630b	91	1097	16.5	+28 2	7.71	8.78	K2	2	..	37440i
42	2933	16.2	-26 44	8.7	9.3	Ko	3	..	42904b	92	1320	16.5	+19 25	8.5	9.0	F8	2	..	37446i
43	3034	16.2	-30 25	9.5	9.0	F8	3	..	42904b	93	1206	16.5	+5 28	8.5	8.6	A3	2	..	38171i
44	1049	16.2	-56 50	8.8	9.6	K2	2	..	18484b	94	1459	16.5	-11 47	6.65	7.83	K5	..	0,8	56,82
45	619	16.2	-61 13	8.0	9.2	F5	4	..	15147b	95	1410	16.5	-14 2	9.7	10.3	Go	2	..	20581b
46	620	16.2	-61 36	9.4	9.7	Fo	2	..	15147b	96	1443	16.5	-16 56	7.9	8.7	G5	2	..	42141b
47	246	16.2	-77 29	9.5	10.5	Ko	2	..	20652b	97	1455	16.5	-17 56	9.1	9.1	Ao	2	..	12630b
48	316	16.3	+72 47	8.9	9.0	A2	2	..	37343i	98	1388	16.5	-18 9	9.1	9.1	Ao	2	..	39681b
49	645	16.3	+63 42	8.6	9.4	G5	3	..	37545i	99	1387	16.5	-18 40	8.9	9.7	G5	3	..	12630b
50	1301	16.3	+50 4	8.72	9.72	Ko	1	..	37419i	100	3130	16.5	-25 2	8.40	8.4	A2	6	..	42904b

THE HENRY DRAPER CATALOGUE.

44400

6^h 16^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3009	16.5	-29 34	8.3	8.6	Ko	5	..	42904b	51	1090	16.8	+27 47	7.8	7.8	Ao	4	..	3744oi
2	3038	16.5	-30 1	3.80	8.13	B3	..	0, R	28,198	52	1204	16.8	+26 2	8.1	8.2	A3	3	..	3744oi
3	2525	16.5	-39 26	8.7	8.9	G5	1	..	20527b	53	1114	16.8	+16 12	8.7	8.7	B9	2	..	37579i
4	2524	16.5	-39 27	6.57	7.9	Ko	8	5,9	20555b	54	1107	16.8	+10 49	8.9	9.3	F5	3	E	37579i
5	2459	16.5	-42 51	8.0	7.6	B9	9	..	20555b	55	1203	16.8	+ 2 10	8.9	8.9	Ao	2	..	38205i
6	2580	16.5	-44 11	9.0	9.2	Ko	3	..	20555b	56	1395	16.8	+ 0 21	8.4	8.4	Ao	4	..	12682b
7	980	16.5	-57 18	7.9	8.7	Ko	5	..	18484b	57	1602	16.8	- 5 15	8.5	8.5	Ao	6	..	20894b
8	425	16.5	-71 37	8.5	9.7	K5	6	0,4	15167b	58	1460	16.8	-11 44	5.49	5.30	B2p	..	0,7 R	56,82
9	377	16.5	-74 16	10.5	10.5	A	2	..	20652b	59	1452	16.8	-12 5	8.4	9.4	Ko	5	..	20581b
10	370	16.5	-75 54	8.7	9.1	F5	5	..	20652b	60	1451	16.8	-12 38	10.6	10.7	A2	2	..	20581b
11	248	16.5	-77 20	8.7	9.7	Ko	7	..	20652b	61	1456	16.8	-13 38	9.1	9.7	Go	3	..	20581b
12	840	16.6	+62 45	7.62	8.80	K5	4	..	37545i	62	1457	16.8	-13 59	8.1	9.5	Ma	4	..	20581b
13	1581	16.6	+40 34	6.86	7.64	G5	4	..	37429i	63	2950	16.8	-32 34	9.0	8.9	F2	2	..	10682b
14	1260	16.6	+14 55	8.44	9.22	G5	2	..	37579i	64	2803	16.8	-34 30	11.4	11.7	F2	1	..	20527b
15	1259	16.6	+14 44	8.3	8.6	Fo	3	..	37579i	65	2817	16.8	-36 19	7.6	7.9	Ao	8	2,3	20527b
16	1122	16.6	+12 5	8.4	8.4	Ao	3	..	37579i	66	2463	16.8	-42 43	8.9	8.0	F2	8	..	20555b
17	1210	16.6	+ 5 25	8.5	9.1	Go	4	..	38411b	67	2464	16.8	-42 59	9.0	10.0	K5	2	..	20555b
18	1200	16.6	+ 2 24	7.36	8.36	Ko	4	0,3-	38205i	68	2386	16.8	-43 52	8.4	8.0	Fo	7	..	20555b
19	1202	16.6	+ 2 19	9.3	9.7	F5	1	..	15138b	69	1052	16.8	-56 2	8.8	9.6	G5	2	..	18484b
20	1266	16.6	- 0 29	7.7	8.5	G5	4	..	37595i	70	608	16.8	-62 16	9.5	10.3	G5	1	..	15147b
21	1491	16.6	-10 29	8.5	9.3	G5	3	..	20581b	71	215	16.8	-79 11	9.4	10.6	K5	2	..	20652b
22	1449	16.6	-12 16	10.2	10.5	F	2	..	20581b	72	401	16.9	+70 37	5.99	6.05	A2	8	E	37343i
23	1412	16.6	-14 15	8.1	8.9	G5	5	..	20581b	73	922	16.9	+58 29	7.6	8.1	F8	5	..	37408i
24	1456	16.6	-17 11	9.1	9.1	Ao	3	..	12630b	74	1583	16.9	+40 52	7.7	8.9	K5	4	..	37397i
25	1457	16.6	-17 47	8.6	8.7	A2	3	..	12630b	75	1331	16.9	+34 19	8.2	9.2	Ko	2	..	38126i
26	1419	16.6	-19 20	8.6	8.8	Fo	4	5,3	12630b	76	1100	16.9	+28 38	8.4	8.4	Ao	3	..	3744oi
27	3935	16.6	-24 16	7.27	7.7	B8	6	0,7	8904b	77	1091	16.9	+27 14	8.2	8.2	B9	3	..	3744oi
28	2391	16.6	-40 16	9.3	10.2	K5	1	..	20555b	78	1304	16.9	+22 34	3.19	4.54	Ma	..	R	773c
29	2460	16.6	-42 43	9.8	8.8	A2	3	..	20555b	79	1604	16.9	- 5 39	8.6	8.6	Ao	7	..	20894b
30	382	16.6	-76 57	9.1	10.1	Ko	5	..	20652b	80	1401	16.9	- 8 11	7.38	8.73	Ma	8	..	20894b
31	87	16.6	-84 13	9.4	10.6	K5	2	..	20557b	81	1402	16.9	- 8 59	9.3	10.5	K5	1	..	20894b
32	584	16.7	+64 16	8.9	9.2	F2	2	..	37545i	82	1431	16.9	- 9 38	7.06	7.06	Ao	10	..	20894b
33	1073	16.7	+55 40	9.0	9.5	F8	1	..	37408i	83	1461	16.9	-11 2	8.7	8.8	A5	5	..	20581b
34	1099	16.7	+28 40	7.7	7.7	Ao	6	..	3744oi	84	1447	16.9	-16 9	8.7	8.8	A2	3	..	12630b
35	1089	16.7	+27 30	8.5	8.6	A3	1	..	3744oi	85	1448	16.9	-16 45	7.9	7.9	B9	3	..	42141b
36	1207	16.7	+ 9 12	7.7	8.7	Ko	3	..	38168i	86	1428	16.9	-21 16	9.1	9.2	Ko	1	..	20535b
37	1294	16.7	+ 8 56	8.9	8.9	Ao	2	..	38411b	87	1386	16.9	-22 18	8.4	8.6	Ko	4	..	20535b
38	1267	16.7	- 0 43	8.9	9.5	Go	2	..	12671b	88	2531	16.9	-39 11	8.1	9.4	K5	3	0,2	20527b
39	1450	16.7	-12 38	9.3	9.9	Go	3	..	20581b	89	463	16.9	-72 28	9.2	10.0	G5	3	..	15167b
40	1356	16.7	-15 35	8.66	8.80	A5	3	..	12630b	90	210	17.0	+80 38	7.30	8.30	Ko	4	2,3-	3833oi
41	1446	16.7	-16 38	8.3	8.3	Ao	2	..	42141b	91	585	17.0	+64 10	9.2	10.0	G5	1	..	37545i
42	1458	16.7	-17 55	7.9	7.9	Ao	7	2,2	12630b	92	961	17.0	+60 51	8.1	8.1	Ao	4	..	37545i
43	2905	16.7	-33 6	8.7	8.3	Ao	3	..	10682b	93	1302	17.0	+50 37	9.9	10.7	G5	1	..	37419i
44	2251	16.7	-48 22	8.3	7.8	Fo	7	..	20547b	94	1292	17.0	+47 10	7.8	8.2	F5	3	..	37428i
45	2179	16.7	-49 58	10.0	10.0	F5	1	..	20547b	95	1524	17.0	+43 17	7.12	7.90	G5	4	5,3	37428i
46	1054	16.7	-56 58	7.9	7.7	Ao	2	0,10	42927b	96	1224	17.0	+17 37	6.77	6.77	Ao	6	..	37446i
47	426	16.7	-71 40	6.49	7.7	F8	5	2,8	9062b	97	1123	17.0	+12 37	5.97	6.25	Fo	8	..	37579i
48	371	16.7	-75 56	8.8	9.2	F5	4	..	20652b	98	1296	17.0	+ 8 22	8.7	8.7	B9	4	..	38411b
49	1122	16.8	+56 47	8.6	8.7	A2	4	..	37408i	99	1268	17.0	- 0 32	8.5	9.7	K5	1	..	12671b
50	1608	16.8	+39 48	8.4	8.4	Ao	3	..	37397i	100	1213	17.0	- 1 31	8.7	9.7	Ko	2	..	12671b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

44500

6^h 17^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1212	m. 17.0	° 1 59	8.57	8.65	A ₃	4	3,2	12682b	51	1430	m. 17.2	° 21 28	9.0	9.1	Ko	1	..	20535b
2	1493	17.0	-10 5	8.28	9.28	Ko	4	..	20581b	52	2847	17.2	-35 37	8.7	7.9	Ao	7	..	20527b
3	1414	17.0	-14 39	9.3	9.4	A ₃	3	..	20581b	53	2587	17.2	-38 7	8.4	9.4	Ko	3	..	20527b
4	1365	17.0	-20 24	9.0	8.5	Ao	5	0,4	12630b	54	142	17.2	-82 34	8.3	8.3	Ao	6	..	20557b
5	3136	17.0	-25 35	8.7	9.0	Fo	3	..	42904b	55	243	17.3	+77 7	8.4	9.2	G ₅	1	..	37343i
6	2806	17.0	-34 6	5.60	5.41	B ₂	..	..	28,196	56	1186	17.3	+51 41	7.16	8.16	Ko	5	..	37408i
7	2400	17.0	-41 0	9.0	8.8	A ₂	4	..	20555b	57	1499	17.3	+37 41	8.7	8.8	A ₂	2	..	37397i
8	2440	17.0	-45 59	8.3	9.8	G ₅	2	..	18483b	58	1277	17.3	+32 24	8.2	9.0	G ₅	3	..	38126i
9	905	17.0	-52 53	10.2	10.3	A ₅	2	..	20547b	59	1283	17.3	+31 50	8.6	8.9	F	1	..	38126i
10	1060	17.0	-53 56	8.2	8.7	F ₂	5	..	20547b	60	1208	17.3	+29 3	9.1	9.2	A ₂	2	..	37440i
11	383	17.0	-76 45	10.0	10.8	G ₅	2	..	20652b	61	1306	17.3	+22 2	8.5	8.5	B ₈	4	..	37446i
12	1101	17.1	+28 48	8.4	8.4	B ₈	4	..	37440i	62	1217	17.3	-1 39	8.7	8.8	A ₃	4	..	12671b
13	1111	17.1	+10 9	8.62	8.62	A	1	E	38200i	63	1216	17.3	-1 44	8.9	9.2	F ₂	2	..	12671b
14	1298	17.1	+8 44	8.7	8.7	Ao	2	..	38411b	64	1578	17.3	-2 23	9.1	9.2	A ₂	2	..	12671b
15	1212	17.1	+5 38	8.1	9.1	Ko	2	..	38171i	65	1607	17.3	-5 7	8.60	8.60	A	5	..	20894b
16	1205	17.1	+2 6	8.9	9.9	Ko	2	..	38205i	66	1608	17.3	-5 14	8.7	8.8	A ₂	5	..	20894b
17	1606	17.1	-5 24	8.1	8.7	Go	7	..	20894b	67	1405	17.3	-9 0	9.1	10.1	Ko	2	..	20894b
18	1517	17.1	-6 24	9.1	10.1	Ko	4	..	20894b	68	1495	17.3	-10 27	9.3	9.4	A ₂	2	..	24463b
19	1453	17.1	-12 56	Neb.	Neb.	Pe	..	R	76,22	69	1391	17.3	-18 7	7.7	8.3	Go	6	..	12630b
20	1458	17.1	-13 48	10.2	10.3	A ₃	2	..	20581b	70	1390	17.3	-18 14	9.1	9.1	Ao	3	..	12630b
21	1415	17.1	-14 21	8.7	9.7	Ko	4	..	20581b	71	1425	17.3	-19 47	8.1	8.5	Ko	5	5,5	20535b
22	3943	17.1	-24 13	9.5	8.7	Ao	3	..	12466b	72	1366	17.3	-20 47	9.3	8.9	F ₅	2	3,2	20535b
23	3942	17.1	-24 29	9.2	8.7	Go	3	..	12466b	73	1389	17.3	-22 9	8.9	9.1	Ko	2	..	20535b
24	3021	17.1	-29 38	7.40	7.8	Fo	4	0,8	9042b	74	2825	17.3	-36 39	10.4	10.0	G ₅	2	..	20527b
25	3048	17.1	-30 36	7.78	9.2	Ma	4	..	42904b	75	2339	17.3	-41 11	9.3	10.0	K ₂	1	..	20555b
26	2911	17.1	-33 33	8.7	9.0	K ₅	3	..	20527b	76	589	17.3	-60 42	9.0	10.3	G ₅	2	..	15147b
27	2846	17.1	-35 15	9.6	9.7	Ko	1	..	20527b	77	541	17.3	-64 0	6.9	6.9	B ₉	8	..	18485b
28	2751	17.1	-37 28	8.0	8.2	Fo	8	..	20527b	78	590	17.3	-69 3	7.4	8.5	K ₂	6	..	18485b
29	2586	17.1	-38 26	10.0	9.7	A ₃	1	..	20527b	79	226	17.4	+78 16	7.15	7.13	B ₉	8	..	37343i
30	2336	17.1	-41 59	8.1	8.8	Fo	5	..	20555b	80	1205	17.4	+26 50	8.8	9.1	F ₂	1	..	37440i
31	2173	17.1	-50 26	10.2	10.3	F	1	..	20547b	81	1241	17.4	+24 5	9.5	9.6	A ₂	3	..	37446i
32	528	17.1	-64 34	8.7	8.7	Ao	4	..	18485b	82	1334	17.4	+23 8	8.6	8.9	Fo	3	..	37446i
33	360	17.1	-73 36	6.80	6.3	B ₉	9	..	9062b	83	1325	17.4	+19 43	8.5	8.5	Ao	4	..	37446i
34	335	17.2	+73 4	8.6	9.4	G ₅	3	R	38169i	84	1118	17.4	+16 34	7.7	7.7	B ₉	5	..	37579i
35	962	17.2	+60 8	9.21	10.28	K ₂	1	..	38239i	85	1173	17.4	+15 54	8.2	8.2	B ₉	4	..	37579i
36	923	17.2	+58 39	8.0	8.3	F ₂	7	..	37408i	86	1214	17.4	+5 11	8.3	8.3	B ₉	4	..	38411b
37	1488	17.2	+49 20	5.10	6.17	K ₂	9	3,8R	37500i	87	1394	17.4	-7 17	9.5	10.1	Go	2	..	20894b
38	1296	17.2	+45 14	8.0	9.2	K ₅	1	..	37438i	88	1462	17.4	-13 31	9.1	9.2	A ₅	4	..	20581b
39	1584	17.2	+40 28	8.4	8.5	A ₂	3	..	37397i	89	2827	17.4	-36 21	10.7	9.7	F ₈	1	..	20527b
40	1612	17.2	+39 10	8.2	9.0	G ₅	2	..	37397i	90	2333	17.4	-46 3	8.5	8.6	F ₅	5	..	18483b
41	1092	17.2	+27 10	7.8	7.8	Ao	6	..	37440i	91	2297	17.4	-47 10	8.9	9.3	F ₈	3	..	18483b
42	1124	17.2	+12 26	8.3	8.3	Ao	4	..	37579i	92	2296	17.4	-47 24	9.0	10.1	K ₅	1	..	18483b
43	1215	17.2	+6 32	8.5	8.5	Ao	3	..	38171i	93	2257	17.4	-48 10	8.2	8.8	K ₂	4	..	20547b
44	1214	17.2	+3 29	8.9	..	Pec.	..	R	M	94	2259	17.4	-48 42	6.39	7.0	Go	10	..	20547b
45	1215	17.2	-1 26	8.3	8.3	Ao	3	..	37595i	95	2175	17.4	-50 51	9.4	9.1	A ₅	3	..	20547b
46	1476	17.2	-4 43	7.9	7.9	Ao	7	..	20894b	96	1017	17.4	-54 50	9.0	9.3	Fo	3	..	20547b
47	1404	17.2	-8 11	7.9	7.9	Ao	9	..	20894b	97	1399	17.5	+20 27	9.0	8.8	B	1	..	37446i
48	1434	17.2	-9 27	8.1	8.1	Ao	6	..	20894b	98	1225	17.5	+17 26	8.2	8.7	F ₈	4	3,3	37579i
49	1459	17.2	-13 37	10.2	10.2	A	4	..	20581b	99	1213	17.5	+9 24	8.5	8.8	Fo	2	..	38411b
50	1423	17.2	-20 0	9.3	9.4	G	1	R	12630b	100	1218	17.5	+6 46	8.9	8.9	B ₉	2	..	38411b

THE HENRY DRAPER CATALOGUE.

44600

6^h 17^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1230	17.5 ^{m.} + 4 34	8.3	9.3	Ko	4	..	..	38411b	51	1547	17.8 ^{m.} + 42 36	8.0	8.1	A3	4	1,3	37397i
2	1229	17.5 + 4 15	6.89	6.97	A3	7	..	..	38171i	52	1395	17.8 + 35 30	8.4	8.5	A2	4	..	38126i
3	1397	17.5 + 0 9	8.68	8.74	A2	3	..	..	12671b	53	1250	17.8 + 25 4	10.7	..	Nb	..	..	M
4	1272	17.5 - 0 27	8.7	9.7	Ko	2	..	..	12671b	54	1273	17.8 - 0 47	7.7	7.7	B9	4	..	37595i
5	1579	17.5 - 2 40	7.7	8.7	Ko	3	..	..	12682b	55	1218	17.8 - 1 27	8.9	9.0	A2	3	..	12671b
6	1435	17.5 - 9 25	9.9	9.9	Ao	3	..	..	24463b	56	1398	17.8 - 7 10	9.1	10.3	K5	1	..	20894b
7	1464	17.5 - 13 18	8.19	9.19	Ko	5	..	..	20581b	57	1399	17.8 - 7 35	8.5	8.5	Ao	6	..	20894b
8	1418	17.5 - 14 33	8.9	8.9	Ao	5	..	..	20581b	58	1406	17.8 - 8 43	9.9	9.9	Ao	3	..	20894b
9	1392	17.5 - 18 24	8.3	9.1	G5	3	..	..	12630b	59	1464	17.8 - 11 19	9.7	10.3	Go	3	..	24463b
10	2758	17.5 - 37 27	7.74	8.5	G5	7	..	..	20527b	60	1465	17.8 - 11 37	10.2	10.5	Fo	1	..	24463b
11	612	17.5 - 62 18	9.4	10.0	Go	2	..	..	15147b	61	1466	17.8 - 11 46	9.9	10.9	Ko	1	..	24463b
12	1527	17.6 + 43 35	7.22	7.22	Ao	7	..	..	37500i	62	1368	17.8 - 20 48	9.3	9.4	K2	1	..	39861b
13	1433	17.6 + 41 9	8.4	8.5	A2	3	..	..	37397i	63	2918	17.8 - 27 29	8.0	8.7	F8	5	..	42904b
14	1484	17.6 + 38 37	7.7	8.3	Go	4	..	..	38126i	64	2538	17.8 - 39 2	9.4	9.4	A5	2	..	20527b
15	1210	17.6 + 29 1	9.1	9.7	Go	2	..	..	37440i	65	2600	17.8 - 44 45	8.4	8.6	G5	4	..	18483b
16	1206	17.6 + 26 9	8.7	8.7	B8	2	..	..	37440i	66	2188	17.8 - 49 4	6.56	7.7	K2	8	..	20547b
17	1335	17.6 + 23 55	9.4	9.4	Ao	2	..	..	37446i	67	672	17.8 - 58 35	8.9	9.7	A2	2	..	15147b
18	1113	17.6 + 10 13	8.23	8.23	Ao	2	E	..	38200i	68	625	17.8 - 61 54	10.0	10.3	F2	2	..	15147b	
19	1479	17.6 - 4 48	8.6	8.7	A2	4	..	..	20894b	69	542	17.8 - 63 6	9.1	9.6	F8	3	..	15147b
20	1609	17.6 - 5 2	8.25	8.31	A2	5	..	..	20894b	70	243	17.9 + 76 11	8.27	8.61	F2	4	..	37343i
21	1361	17.6 - 15 37	6.71	7.49	G5	7	..	..	12630b	71	963	17.9 + 60 41	7.9	8.7	G5	1	..	37545i
22	3755	17.6 - 23 6	9.7	9.2	Ko	1	..	..	20535b	72	1188	17.9 + 51 56	9.0	9.1	A5	3	..	37419i
23	3144	17.6 - 25 18	7.4	8.5	Fo	6	..	..	42904b	73	1589	17.9 + 40 54	8.5	9.3	G5	2	..	37397i
24	2854	17.6 - 35 5	9.4	9.1	A5	6	R	..	20527b	74	1251	17.9 + 25 28	8.5	8.3	B	2	R	37440i	
25	2470	17.6 - 42 48	9.6	9.4	Go	1	..	..	20555b	75	1229	17.9 + 17 56	8.2	8.8	Go	2	..	37579i
26	2396	17.6 - 43 37	9.8	9.5	A2	2	..	..	20555b	76	1270	17.9 + 14 5	7.8	8.8	Ko	3	..	37579i
27	670	17.6 - 58 1	9.1	10.0	Ko	2	..	..	18484b	77	1305	17.9 + 8 26	9.3	9.3	Ao	2	..	38411b
28	627	17.6 - 59 57	9.5	10.5	K	1	..	..	15147b	78	1480	17.9 - 4 55	8.20	8.20	Ao	6	..	20894b
29	361	17.6 - 73 25	9.5	10.6	K2	3	..	..	20652b	79	1612	17.9 - 5 22	8.5	8.5	Ao	7	..	20894b
30	924	17.7 + 58 47	8.0	8.5	F8	2	..	..	37408i	80	1407	17.9 - 8 36	10.2	11.2	Ko	1	..	20894b
31	1026	17.7 + 54 35	9.2	10.6	Ma	..	..	..	M	81	1457	17.9 - 12 54	8.5	9.0	F8	5	..	20581b
32	1017	17.7 + 53 7	8.6	8.9	Fo	3	..	..	37408i	82	1456	17.9 - 16 41	8.6	9.4	G5	6	..	12630b
33	1501	17.7 + 37 23	7.22	8.22	Ko	4	..	..	38126i	83	1393	17.9 - 22 54	9.9	9.2	F5	2	..	20535b
34	1249	17.7 + 25 18	8.8	8.9	A5	2	..	..	37440i	84	3764	17.9 - 23 15	9.5	9.1	Fo	2	..	20535b
35	1226	17.7 + 17 42	8.3	9.1	G5	2	..	..	37579i	85	2920	17.9 - 33 41	9.0	8.6	Ao	5	..	20527b
36	1175	17.7 + 15 55	8.7	8.7	B9	2	..	..	37579i	86	2832	17.9 - 36 38	10.7	9.7	A5	2	..	20527b
37	1176	17.7 + 15 9	7.7	7.6	B5	3	2,2 R	..	37579i	87	2347	17.9 - 41 31	9.0	9.5	F5	2	..	20555b	
38	1218	17.7 + 3 49	7.5	8.5	Ko	3	..	..	38171i	88	2344	17.9 - 46 38	7.9	8.6	K5	4	..	18483b
39	1581	17.7 - 2 9	var.	var.	Md	5	R	..	12682b	89	907	17.9 - 52 32	10.3	10.6	F2	3	..	20547b	
40	1454	17.7 - 16 33	8.5	8.6	A5	7	..	..	12630b	90	926	18.0 + 58 51	8.0	9.1	K2	1	..	38239i
41	1395	17.7 - 18 49	9.1	9.5	F5	3	..	..	12630b	91	1125	18.0 + 56 20	5.50	5.58	A3	10	..	37408i
42	3031	17.7 - 29 7	7.67	8.3	F5	6	..	..	42904b	92	1141	18.0 + 46 35	8.2	8.2	Ao	4	E	37428i
43	2917	17.7 - 33 2	7.64	8.6	Ko	3	..	..	10682b	93	1486	18.0 + 38 9	9.0	10.0	Ko	1	..	38941i
44	2342	17.7 - 41 23	8.5	9.2	F2	3	..	..	20555b	94	1397	18.0 + 35 18	6.88	7.88	Ko	6	..	38126i
45	177	17.7 - 81 1	8.81	10.1	K2	3	..	..	20557b	95	1399	18.0 + 35 12	8.1	8.4	F2	4	..	38126i
46	317	17.8 + 72 5	8.2	8.2	B9	4	..	..	37343i	96	1336	18.0 + 34 27	8.7	8.7	Ao	3	..	38126i
47	925	17.8 + 58 28	8.0	8.8	G5	3	..	..	38239i	97	1203	18.0 + 18 31	8.5	8.8	Fo	4	..	37446i
48	1076	17.8 + 55 54	7.9	8.9	Ko	2	..	..	37419i	98	1230	18.0 + 17 21	9.6	9.6	A	1	..	37579i
49	1077	17.8 + 55 45	7.8	8.6	G5	3	..	..	37408i	99	1260	18.0 + 7 33	8.9	8.9	Ao	3	..	38171i
50	1304	17.8 + 50 10	9.0	9.3	Fo	2	..	..	37419i	100	1221	18.0 + 3 49	6.25	6.08	B3	..	2,8	56,82

ANNALS OF HARVARD COLLEGE OBSERVATORY.

44700

6^h 18^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1413	18.0	- 3 14	6.58	6.46	B5	6	..	37595i	51	986	18.3	-58 0	9.4	9.7	Fo	2	..	18484b
2	1481	18.0	- 4 8	8.5	8.5	Ao	4	..	12671b	52	530	18.3	-64 45	9.3	9.6	Fo	2	..	18485b
3	1614	18.0	- 5 39	9.1	9.9	G5	4	..	20894b	53	372	18.3	-75 8	9.6	10.6	Ko	2	..	20652b
4	1427	18.0	-19 3	8.7	8.5	B9	8	..	12630b	54	527	18.4	+65 45	9.5	10.1	G	1	..	37545i
5	2345	18.0	-46 56	8.4	10.4	K5	1	..	18483b	55	1251	18.4	+24 49	8.86	8.86	Ao	2	..	37440i
6	205	18.1	+79 15	8.7	9.1	F5	2	..	37343i	56	1484	18.4	- 4 39	6.42	6.40	B9	6	..	37595i
7	429	18.1	+67 21	9.2	9.5	Fo	3	..	38155i	57	1527	18.4	- 6 22	9.1	10.1	Ko	3	..	20894b
8	927	18.1	+58 28	5.48	6.55	K2	8	..	37408i	58	1500	18.4	-10 37	9.5	9.6	A3	3	..	24463b
9	1027	18.1	+54 24	8.5	9.6	K2	2	..	37419i	59	1469	18.4	-11 47	9.5	10.7	K5	1	..	24463b
10	1615	18.1	+39 28	9.4	9.4	Ao	1	..	37397i	60	1472	18.4	-13 55	9.5	10.6	K2	2	..	20581b
11	1422	18.1	+36 6	8.0	9.0	Ko	2	..	38126i	61	1429	18.4	-19 27	9.7	9.4	Ao	2	..	12630b
12	1151	18.1	+10 59	7.7	7.7	Ao	6	..	37579i	62	2927	18.4	-33 23	3.98	4.76	G5	..	5, R	28, 198
13	1262	18.1	+ 7 40	8.5	9.6	K2	1	..	38411b	63	2408	18.4	-43 11	9.0	9.2	G5	2	..	20555b
14	1219	18.1	+ 5 39	8.7	8.8	A5	2	E	38171i	64	2607	18.4	-44 44	8.39	8.6	Ao	6	..	18483b
15	1210	18.1	+ 2 48	8.9	9.2	Fo	2	..	38205i	65	908	18.4	-52 2	6.7	8.3	K2	6	..	20547b
16	1313	18.1	+ 1 14	8.5	8.9	F5	3	..	12682b	66	1213	18.5	+29 46	6.52	6.50	B9	8	..	38126i
17	1400	18.1	+ 0 56	8.49	8.49	Ao	4	0,3	38205i	67	1338	18.5	+23 29	8.8	8.8	Ao	2	..	37440i
18	1399	18.1	+ 0 17	8.9	8.9	Ao	4	..	12671b	68	1181	18.5	+15 55	7.6	7.6	Ao	6	..	37579i
19	1221	18.1	- 1 33	8.7	9.5	G5	2	..	12671b	69	1236	18.5	+ 4 39	4.48	4.62	A5	..	..	56, 82
20	1414	18.1	- 3 28	7.00	6.95	B8	4	..	37595i	70	1237	18.5	+ 4 39	6.54	6.68	Ko	5	0,4-	38205i
21	1526	18.1	- 6 29	8.4	9.6	K5	5	..	20894b	71	1213	18.5	+ 2 43	7.07	8.07	Fo	3	..	20581b
22	1394	18.1	-22 12	8.6	8.5	F2	4	..	20535b	72	1462	18.5	-12 55	9.3	9.6	A2	6	..	12630b
23	2922	18.1	-27 29	10.7	9.6	A5	1	..	42904b	73	1401	18.5	-18 48	9.1	9.2	Ko	1	..	12630b
24	3066	18.1	-30 33	9.7	9.5	A	2	..	42904b	74	1430	18.5	-19 47	9.3	9.5	Fo	4	..	42904b
25	614	18.1	-62 56	9.9	10.5	G	1	..	15147b	75	3037	18.5	-29 49	8.7	8.6	Ko	7	..	20527b
26	613	18.1	-62 58	10.4	10.4	Ao	2	..	15147b	76	2822	18.5	-35 0	7.40	8.5	Ko	2	..	15147b
27	504	18.1	-70 49	9.9	10.9	Ko	2	..	15167b	77	627	18.5	-61 17	9.0	10.5	G	1	..	18485b
28	365	18.1	-73 11	9.4	10.6	K5	1	..	15167b	78	574	18.5	-65 4	9.74	9.9	Fo	2	..	37397i
29	1435	18.2	+41 13	8.8	8.9	A2	1	..	37397i	79	1617	18.6	+39 41	8.6	8.9	Ko	5	..	37446i
30	1234	18.2	+ 4 41	8.9	10.1	K5	1	..	38411b	80	1255	18.6	+25 6	6.56	7.56	A2	2	..	37446i
31	1583	18.2	- 2 36	8.9	8.9	A	3	..	12682b	81	1340	18.6	+23 13	8.7	8.8	B9	6	..	38168i
32	1616	18.2	- 5 24	9.1	9.1	Ao	5	..	20894b	82	1223	18.6	+ 9 13	7.20	7.18	Ao	8	..	38168i
33	1401	18.2	- 7 53	8.9	8.9	Ao	4	..	20894b	83	1316	18.6	+ 8 56	6.11	6.11	A2	3	..	12671b
34	1439	18.2	- 9 45	9.1	9.4	Fo	3	..	24463b	84	1402	18.6	+ 0 2	9.08	9.14	A2	3	..	12671b
35	3768	18.2	-23 32	8.1	8.2	A3	5	..	8904b	85	1278	18.6	- 0 18	8.9	9.0	G5	5	..	12630b
36	2960	18.2	-26 14	7.9	9.0	K2	4	..	42904b	86	1403	18.6	-18 35	8.6	9.4	Ao	3	..	20527b
37	2606	18.2	-44 43	7.58	7.7	B8	8	..	18483b	87	2861	18.6	-35 51	10.9	9.4	A3	2	..	18483b
38	1276	18.3	+14 10	7.3	7.3	Aop	5	R	37579i	88	2310	18.6	-47 21	9.8	9.3	A2	3	..	18483b
39	1220	18.3	+ 5 4	9.36	9.36	Ao	3	..	38411b	89	2312	18.6	-47 41	9.8	9.3	Ko	2	..	15147b
40	1276	18.3	- 0 54	8.4	9.4	Ko	3	..	12671b	90	628	18.6	-61 42	9.1	10.3	A2	3	..	37545i
41	1412	18.3	- 8 17	9.5	10.1	Go	2	..	20894b	91	528	18.7	+65 32	8.8	8.9	F8	1	..	37397i
42	1499	18.3	-10 26	9.1	10.1	Ko	2	..	24463b	92	1533	18.7	+43 8	8.6	9.1	A3	2	..	38126i
43	1467	18.3	-17 54	1.99	1.77	B1	..	R	4539c	93	1401	18.7	+35 47	9.1	9.2	Ko	6	..	38126i
44	1433	18.3	-21 23	10.2	9.4	A2	2	..	20535b	94	1287	18.7	+32 20	6.91	7.91	Ao	2	..	37440i
45	1395	18.3	-22 33	8.6	9.1	K2	2	..	20535b	95	1110	18.7	+28 37	8.6	8.6	Ao	5	..	37440i
46	3072	18.3	-30 29	7.73	8.9	K5	3	..	42904b	96	1109	18.7	+28 5	7.7	7.7	B9	3	..	15138b
47	2925	18.3	-33 54	8.4	8.3	G5	5	..	20527b	97	1322	18.7	+ 1 45	8.9	8.9	Go	4	..	20894b
48	2820	18.3	-34 29	9.1	9.7	G5	2	..	20527b	98	1403	18.7	- 7 49	8.7	9.3	Ko	1	..	24463b
49	2819	18.3	-34 43	7.6	8.6	Ko	5	..	20527b	99	1501	18.7	-10 43	9.0	10.0	A3	4	2,9	42141b
50	2840	18.3	-36 10	9.4	9.5	Ko	2	..	20527b	100	1423	18.7	-14 47	6.89	6.97				

THE HENRY DRAPER CATALOGUE.

44800

6^h 18^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3967	18.7	-24 50	8.15	9.1	K5	3	E	20535b	51	1139	19.0	+12 55	7.9	9.0	K2	2	..	37579i
2	2927	18.7	-27 49	9.5	9.6	F8	2	..	42904b	52	1157	19.0	+11 33	8.5	8.6	A2	3	..	37579i
3	2863	18.7	-35 19	9.0	8.8	F2	3	..	20527b	53	1159	19.0	+11 19	7.00	8.00	Ko	5	..	37579i
4	2421	18.7	-40 50	9.3	9.5	Ko	2	..	20555b	54	1229	19.0	+3 8	9.3	9.3	Ao	2	..	38205i
5	676	18.7	-58 15	9.1	9.9	F5	3	..	18484b	55	1406	19.0	+0 0	9.3	9.3	Ao	2	..	12671b
6	244	18.8	+77 46	8.9	8.9	Ao	2	..	37343i	56	1491	19.0	-4 45	9.5	9.5	Ao	2	..	20803b
7	402	18.8	+69 59	8.44	8.44	Ao	5	..	38155i	57	1446	19.0	-9 18	8.5	8.8	Fo	3	..	12672b
8	976	18.8	+59 28	8.6	9.4	G5	3	..	37408i	58	1472	19.0	-11 37	9.7	9.7	Ao	4	..	24463b
9	1492	18.8	+49 0	8.8	8.9	A2	3	..	37500i	59	1463	19.0	-12 41	9.1	9.1	Ao	4	..	20581b
10	1301	18.8	+45 12	9.7	10.8	K2	..	..	M	60	1397	19.0	-22 12	9.0	9.4	Ko	1	..	20535b
11	1335	18.8	+19 45	8.7	8.6	B5	2	..	37446i	61	2952	19.0	-28 49	8.9	9.6	Ko	1	..	42904b
12	1229	18.8	+13 4	7.4	8.2	G5	4	..	37579i	62	2203	19.0	-49 18	8.4	8.5	F2	5	..	20547b
13	1266	18.8	+7 57	7.9	8.0	A3	3	..	38168i	63	1026	19.0	-54 30	9.5	9.6	A2	2	..	20547b
14	1267	18.8	+7 8	8.50	8.56	A2	3	..	38171i	64	593	19.0	-69 7	7.9	8.2	F2	8	0,3	18485b
15	1403	18.8	+0 2	8.28	8.28	Ao	6	..	12671b	65	1439	19.1	+41 7	8.5	8.5	Ao	2	..	37397i
16	1444	18.8	-9 49	6.44	7.62	K5	5	..	12672b	66	1598	19.1	+39 59	7.92	7.90	B9	6	..	37397i
17	1475	18.8	-13 35	9.3	10.1	G5	2	..	20581b	67	1135	19.1	+16 7	6.35	7.13	G5	7	..	37579i
18	1366	18.8	-15 51	8.5	8.6	A3	6	..	12630b	68	1160	19.1	+11 6	8.2	9.2	Ko	2	..	38200i
19	1469	18.8	-17 32	9.9	9.9	A	1	..	12630b	69	1318	19.1	+8 27	7.3	7.4	A5	5	..	38168i
20	1404	18.8	-18 10	8.3	8.3	Ao	2	..	42141b	70	1227	19.1	+5 23	8.8	8.8	Ao	3	..	38411b
21	3969	18.8	-24 31	7.44	8.2	G5	4	..	8904b	71	1228	19.1	+5 21	8.9	8.9	Ao	2	..	38411b
22	3968	18.8	-24 56	8.55	8.7	A2	2	..	8904b	72	1228	19.1	-1 25	8.8	8.9	A3	3	..	12682b
23	2971	18.8	-26 16	8.9	8.7	F2	5	..	42904b	73	1474	19.1	-11 41	9.9	11.1	K5	1	..	24463b
24	2355	18.8	-46 7	8.4	8.9	Go	5	..	18483b	74	1464	19.1	-12 31	8.5	9.1	Go	6	..	20581b
25	629	18.8	-61 47	9.0	8.9	A5	5	..	15147b	75	2785	19.1	-37 57	8.7	9.4	K2	3	..	20527b
26	373	18.8	-75 13	10.5	10.6	A5	2	..	20652b	76	2361	19.1	-46 4	9.6	9.3	A3	4	..	18483b
27	220	18.8	-78 12	9.8	10.6	G5	5	..	20652b	77	2205	19.1	-49 30	9.4	10.3	G5	1	..	20547b
28	143	18.8	-82 1	7.44	7.4	Fo	10	..	20557b	78	1027	19.1	-54 53	8.73	8.7	Go	5	..	20547b
29	964	18.9	+60 27	9.2	9.6	F5	1	..	38239i	79	617	19.1	-62 11	9.4	10.4	Ko	1	..	15147b
30	1126	18.9	+56 48	9.0	10.2	K5	..	..	M	80	548	19.1	-63 47	7.0	8.0	Ko	7	..	18485b
31	1142	18.9	+46 52	8.4	8.4	B8	3	..	37428i	81	118	19.1	-83 33	8.9	9.9	Ko	3	..	20557b
32	1442	18.9	+44 47	7.07	7.05	B9	4	..	37500i	82	1538	19.2	+43 58	9.0	9.0	Ao	2	..	37500i
33	1437	18.9	+41 39	8.5	8.5	B9	3	..	37397i	83	1344	19.2	+23 46	7.07	7.35	Fo	5	..	37446i
34	1490	18.9	+38 6	7.18	7.96	G5	5	..	38126i	84	1184	19.2	+15 4	8.89	8.84	B8	3	..	37579i
35	1506	18.9	+37 46	9.4	10.5	K2	1	..	38941i	85	1235	19.2	+13 5	8.7	8.7	B9	3	..	37579i
36	1255	18.9	+24 21	8.0	8.5	F8	4	..	37446i	86	1319	19.2	+8 0	8.8	9.6	G5	2	..	38411b
37	1137	18.9	+12 21	8.7	8.7	Ao	3	..	37579i	87	1284	19.2	-0 41	8.5	8.5	Ao	3	..	37595i
38	1323	18.9	+1 18	9.3	9.4	A2	2	..	38205i	88	1415	19.2	-8 9	9.1	9.2	A2	3	..	20894b
39	1405	18.9	+0 22	8.9	8.9	Ao	3	0,3	12671b	89	1416	19.2	-9 1	8.3	9.3	Ko	4	5,1	24463b
40	1280	18.9	-0 55	8.4	9.4	Ko	4	..	12671b	90	1465	19.2	-12 41	10.2	10.2	Ao	3	..	20581b
41	1490	18.9	-4 41	7.39	8.39	Ko	6	0,4	20803b	91	1428	19.2	-15 1	6.40	7.47	K2	8	..	12630b
42	1424	18.9	-14 6	8.5	9.6	K2	5	..	20581b	92	1461	19.2	-16 25	6.55	6.69	A5	5	..	42141b
43	2930	18.9	-33 49	8.4	8.3	Go	7	..	20527b	93	1405	19.2	-18 57	7.42	8.42	Ko	8	..	12630b
44	2554	18.9	-39 10	7.80	8.8	Ko	6	5,4	20527b	94	1373	19.2	-20 53	8.3	8.6	Ko	3	..	20535b
45	2482	18.9	-42 14	8.8	9.5	K5	2	..	20555b	95	1438	19.2	-21 11	8.5	8.8	Fo	4	..	20535b
46	631	18.9	-61 17	6.8	8.3	G5	7	..	15147b	96	2935	19.2	-33 34	7.16	8.3	Ma	4	..	20527b
47	630	18.9	-61 30	9.0	8.9	A5	5	..	15147b	97	2186	19.2	-50 18	8.9	10.3	K5	1	..	20547b
48	506	18.9	-70 46	10.0	10.6	G	1	..	15167b	98	516	19.2	-66 1	8.5	9.0	F8	5	..	18485b
49	843	19.0	+62 47	7.8	8.1	Fo	5	..	37545i	99	384	19.2	-76 10	8.1	8.9	G5	7	..	20652b
50	1318	19.0	+33 18	8.5	9.1	Go	3	..	38126i	100	1070	19.3	+52 37	8.7	9.0	F2	3	..	37419i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

44900

6^h 19^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1552	19.3	+42 1	7.14	7.92	G5	4	..	37500i	51	1478	19.5	-11 28	5.39	6.39	Ko	..	0,9	56,82
2	1599	19.3	+40 25	7.77	7.77	Ao	7	..	37397i	52	1429	19.5	-14 26	9.3	10.3	Ko	4	..	24463b
3	1345	19.3	+23 7	8.6	8.7	A5	2	..	37446i	53	1435	19.5	-19 44	6.56	6.3	B8	7	0,6-	8916b
4	1235	19.3	+17 3	6.82	6.80	B9	8	..	37579i	54	3795	19.5	-23 10	8.7	8.5	F5	5	..	20535b
5	1280	19.3	+14 28	8.9	9.0	A5	2	..	37579i	55	2956	19.5	-28 14	9.7	9.6	Fo	1	..	42904b
6	1241	19.3	+4 32	8.5	9.6	K2	2	..	38411b	56	3245	19.5	-31 45	6.44	7.4	G5	6	0,5	10682b
7	1240	19.3	+4 15	7.5	7.5	B9	7	..	38171i	57	2563	19.5	-39 47	9.6	9.5	Fo	2	..	20527b
8	1591	19.3	-2 55	9.5	9.5	Ao	2	..	12671b	58	1874	19.5	-51 12	6.77	7.2	A2	10	..	20547b
9	1532	19.3	-6 31	9.5	9.6	A2	4	..	20803b	59	77	19.5	-86 4	8.2	8.3	A5	6	..	15145b
10	1449	19.3	-9 20	9.3	9.7	F5	2	..	24463b	60	966	19.6	+57 38	8.6	9.7	K2	2	..	37408i
11	1504	19.3	-10 39	8.7	9.7	Ko	2	..	24463b	61	1079	19.6	+55 31	9.4	10.6	K5	..	..	M
12	1476	19.3	-13 41	9.3	10.5	K5	2	..	24463b	62	1629	19.6	+39 44	7.67	8.45	G5	5	..	37397i
13	1374	19.3	-20 7	7.73	7.9	B9	8	..	12630b	63	1231	19.6	+21 35	9.4	9.4	Ao	2	R	37446i
14	3049	19.3	-29 14	10.4	9.8	A2	1	..	42904b	64	1231	19.6	+21 35	9.4	9.4	Ao	2	R	37446i
15	2826	19.3	-34 24	8.8	9.1	K5	3	..	20527b	65	1162	19.6	+11 45	7.7	7.6	B5	4	..	37579i
16	2418	19.3	-43 50	8.9	10.4	K5	1	..	20555b	66	1242	19.6	+4 56	7.06	7.48	F5	7	..	38171i
17	2364	19.3	-46 40	9.4	9.2	F8	3	..	18483b	67	1473	19.6	-17 23	8.9	9.0	A2	6	..	12630b
18	909	19.3	-52 37	7.4	8.6	G5	7	..	20547b	68	1375	19.6	-20 25	9.3	8.9	Ao	2	0,2	12630b
19	1028	19.3	-54 19	8.2	8.4	Fo	6	..	20547b	69	1398	19.6	-22 7	9.3	9.4	Fo	2	..	20535b
20	634	19.3	-61 33	9.7	10.2	F8	2	..	15147b	70	3054	19.6	-29 58	8.50	8.9	A5	4	..	42904b
21	633	19.3	-61 39	10.7	10.8	A5	1	..	15147b	71	2870	19.6	-35 40	9.3	9.1	Go	3	..	20527b
22	221	19.3	-78 8	10.4	11.2	G5	2	..	20652b	72	2467	19.6	-45 55	6.94	7.2	B9	10	..	18483b
23	1190	19.4	+51 57	9.7	9.8	A3	2	..	37419i	73	1320	19.7	+33 11	8.6	9.0	F5	2	..	38126i
24	1445	19.4	+44 52	8.92	10.10	K5	..	..	M	74	1232	19.7	+21 42	6.65	7.43	G5	6	..	37446i
25	1292	19.4	+32 32	8.8	8.9	A3	2	..	38126i	75	1409	19.7	+0 12	8.9	8.9	Ao	2	2,2	12671b
26	1346	19.4	+23 30	6.77	7.55	G5	3	..	37446i	76	1422	19.7	-3 56	9.3	9.3	A	1	..	12671b
27	1347	19.4	+23 23	6.02	6.02	Ao	8	..	37446i	77	3056	19.7	-29 13	7.9	9.0	G5	5	..	42904b
28	1230	19.4	+21 59	8.6	8.6	B9	3	..	37446i	78	3055	19.7	-29 49	6.08	8.3	Ko	7	..	42904b
29	1229	19.4	+6 53	8.9	9.0	A2	2	..	38411b	79	2833	19.7	-34 57	6.58	6.9	B9	5	..	42145b
30	1477	19.4	-13 9	9.1	9.2	A2	4	..	20581b	80	2363	19.7	-41 18	8.1	9.4	Ko	4	..	20555b
31	1463	19.4	-16 34	9.5	9.5	Ao	3	..	12630b	81	250	19.7	-77 1	8.5	8.6	A5	7	..	20652b
32	1462	19.4	-16 53	9.3	9.4	A5	2	..	12630b	82	174	19.8	+82 21	9.2	9.8	G	2	..	38330i
33	2977	19.4	-26 20	7.4	9.1	K5	5	..	42904b	83	1237	19.8	+17 52	8.8	8.8	Ao	1	..	37579i
34	3096	19.4	-30 54	7.55	8.3	Fo	3	0,7	9042b	84	1283	19.8	+14 48	6.56	..	Nb	3	R	37579i
35	2854	19.4	-36 57	9.4	9.7	F5	2	..	20527b	85	1163	19.8	+11 17	7.7	8.2	F8	5	..	37579i
36	2365	19.4	-46 23	9.6	9.2	A2	3	..	18483b	86	1131	19.8	+10 52	7.5	7.5	B8	7	E	37579i
37	679	19.4	-58 19	7.7	8.4	B9	8	..	18484b	87	1232	19.8	+9 13	7.5	8.5	Ko	6	..	38168i
38	550	19.4	-63 4	10.0	10.4	F5	2	..	15147b	88	1324	19.8	+8 4	8.7	8.7	Ao	2	..	38168i
39	572	19.4	-67 33	9.1	10.1	K	1	..	18485b	89	1274	19.8	+7 41	9.1	9.1	Ao	2	..	38411b
40	..	19.4	-77 51	..	..	G	2	..	20652b	90	1273	19.8	+7 8	var.	var.	G5p	7	5,6 R	38168i
41	1323	19.5	+22 31	7.7	7.8	A3	5	..	37446i	91	1222	19.8	+2 0	8.8	8.8	Ao	3	..	15138b
42	1211	19.5	+18 11	8.8	9.2	F5	1	..	37579i	92	1330	19.8	+1 1	8.69	8.75	A2	2	..	38205i
43	1139	19.5	+16 6	8.7	9.0	F	2	..	37579i	93	1232	19.8	-1 44	9.1	9.1	Ao	2	..	12671b
44	1128	19.5	+10 35	7.7	7.7	B9	5	..	37579i	94	1535	19.8	-6 50	8.3	9.3	Ko	4	..	20803b
45	1233	19.5	+3 49	8.7	10.1	Ma	1	..	38205i	95	1421	19.8	-8 4	9.5	9.5	Ao	3	..	20894b
46	1219	19.5	+2 55	8.9	9.5	Go	1	..	38205i	96	1470	19.8	-12 55	5.95	5.90	B8	7	..	8916b
47	1407	19.5	+0 57	8.44	8.52	A3	3	0,3-	38205i	97	1479	19.8	-13 27	10.2	11.0	G5	1	..	24463b
48	1231	19.5	-1 22	6.56	6.51	B8	5	..	37595i	98	1480	19.8	-13 33	10.2	11.2	Ko	1	..	24463b
49	1420	19.5	-3 28	8.5	8.9	F5	4	..	12682b	99	1430	19.8	-14 46	8.3	9.4	K2	4	..	12630b
50	1622	19.5	-5 22	9.1	9.1	B9	4	..	20803b	100	1437	19.8	-19 57	8.48	9.1	Ko	1	..	20535b

THE HENRY DRAPER CATALOGUE.

45000

6^h 19^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2858	19.8	-36 5	10.2	9.5	Go	2	..	20527b	51	1498	20.1	-4 23	9.0	9.1	A3	2	..	12671b
2	1066	19.8	-56 19	7.0	8.2	Ma	7	..	18484b	52	1510	20.1	-10 22	8.9	9.7	G5	4	..	24463b
3	1024	19.9	+53 7	8.4	8.9	F8	4	..	37408i	53	1373	20.1	-15 35	9.1	9.2	A2	7	..	12630b
4	1387	19.9	+48 51	7.29	7.71	F5	7	3,4	37500i	54	1408	20.1	-18 59	9.1	9.2	A5	3	..	12630b
5	1343	19.9	+34 4	7.62	8.80	K5	3	..	38126i	55	2490	20.1	-42 59	8.8	9.5	K5	3	..	20555b
6	1221	19.9	+29 42	8.8	8.8	Ao	2	..	37440i	56	2472	20.1	-45 35	6.66	8.0	Ko	7	..	18483b
7	1233	19.9	+21 52	9.1	9.1	Ao	2	..	37446i	57	1070	20.1	-53 17	6.96	7.3	B5	4	..	11009b
8	1285	19.9	+14 5	8.5	8.5	Ao	3	..	37579i	58	637	20.1	-59 59	7.19	7.8	A5	4	..	42927b
9	1238	19.9	+13 45	9.6	9.6	A	1	..	37579i	59	522	20.1	-66 31	9.0	9.3	Fo	4	..	18485b
10	1410	19.9	+0 27	8.8	8.8	Ao	4	0,2-	12671b	60	1440	20.2	+41 14	9.0	10.0	Ko	1	..	37397i
11	1286	19.9	-0 18	8.3	8.3	Ao	5	0,3	12671b	61	1509	20.2	+37 22	8.2	9.3	K2	1	..	38941i
12	1597	19.9	-2 58	9.1	9.1	Ao	3	..	12682b	62	1430	20.2	+36 16	8.5	8.6	A2	3	0,3	38126i
13	1627	19.9	-5 26	7.9	8.3	F5	8	..	20803b	63	1263	20.2	+24 47	9.1	9.4	Fo	2	..	37440i
14	1450	19.9	-9 35	9.7	10.0	Fo	2	..	24463b	64	1326	20.2	+22 47	8.6	9.4	G5	2	..	37446i
15	1508	19.9	-10 29	8.7	9.5	G5	3	..	24463b	65	1241	20.2	+17 15	8.4	9.6	K5	..	..	M
16	1467	19.9	-16 11	6.67	6.75	A3	4	..	42141b	66	1236	20.2	+6 21	8.1	8.2	A5	3	..	38168i
17	3190	19.9	-25 6	8.25	8.2	A3	3	..	8904b	67	1287	20.2	-0 52	5.85	6.35	F8	6	..	37595i
18	3189	19.9	-25 32	5.73	7.8	K2	..	3,7	56,122	68	1629	20.2	-5 47	8.3	8.3	Ao	7	..	20803b
19	2187	19.9	-50 32	9.4	9.4	Fo	2	..	20547b	69	1452	20.2	-9 6	9.9	10.2	Fo	2	..	24463b
20	1068	19.9	-53 56	8.0	8.4	Ao	7	..	20547b	70	1451	20.2	-9 28	10.2	10.3	A3	1	..	24463b
21	491	19.9	-68 47	9.2	10.0	G5	2	..	18485b	71	1473	20.2	-12 36	9.3	9.3	Ao	5	..	24463b
22	978	20.0	+59 2	8.5	9.5	Ko	2	..	37408i	72	1444	20.2	-21 55	9.5	8.8	Ao	3	..	20535b
23	1272	20.0	+25 34	8.6	8.7	A2	3	..	37440i	73	3810	20.2	-23 21	9.3	9.2	Fo	1	..	20535b
24	1412	20.0	+20 9	9.4	9.4	Ao	3	..	37446i	74	2993	20.2	-26 24	6.86	8.1	G5	8	..	42904b
25	1240	20.0	+13 20	8.3	8.3	B9	4	..	37579i	75	2619	20.2	-38 14	10.2	10.3	Ao	2	..	20527b
26	1164	20.0	+11 15	8.3	8.6	F2	3	..	37579i	76	2430	20.2	-43 56	8.3	9.5	K5	4	..	20555b
27	1325	20.0	+8 12	9.1	9.1	B8	2	..	38411b	77	2190	20.2	-50 3	8.14	8.5	G5	7	..	20547b
28	1537	20.0	-6 12	9.1	9.4	F2	3	..	20803b	78	620	20.2	-62 9	8.8	10.2	Ma	3	..	15147b
29	1413	20.0	-7 33	8.7	8.7	B8	7	..	20803b	79	554	20.2	-63 53	8.7	9.9	K5	2	..	18485b
30	1471	20.0	-12 7	10.2	10.8	Go	1	..	24463b	80	598	20.2	-69 45	6.94	7.4	F8	..	3,6-	28,198
31	1482	20.0	-13 20	9.9	10.0	A2	3	..	24463b	81	427	20.2	-72 0	9.7	10.9	K5	1	..	15167b
32	1469	20.0	-16 44	9.0	9.3	Fo	3	..	12630b	82	1032	20.3	+54 27	8.4	9.6	K5	..	..	M
33	2944	20.0	-33 16	8.0	7.4	F2	3	..	9042b	83	1388	20.3	+48 3	8.9	10.1	K5	..	..	M
34	2471	20.0	-45 53	8.0	9.2	K2	2	..	18483b	84	1442	20.3	+41 21	9.7	9.8	A2	1	..	37397i
35	2279	20.0	-48 43	9.1	10.0	Ko	1	..	18483b	85	1408	20.3	+35 30	7.9	7.9	B9	6	..	38126i
36	682	20.0	-58 5	9.3	10.5	K5	1	..	18484b	86	1327	20.3	+22 48	8.8	9.1	F2	3	..	37446i
37	600	20.0	-60 56	8.2	10.5	Ko	3	..	15147b	87	..	20.3	+19 8	..	..	Pec.	..	R	M
38	619	20.0	-62 19	7.6	7.7	A2	9	..	15147b	88	1214	20.3	+18 49	6.86	7.86	Ko	5	..	37446i
39	469	20.0	-72 5	8.2	8.2	Ao	5	2,3	24561b	89	1191	20.3	+15 13	7.04	8.04	Ko	4	..	37579i
40	144	20.0	-82 8	7.61	6.9	B8	10	..	20557b	90	1169	20.3	+11 11	7.2	7.2	Ao	8	E	37579i
41	1603	20.1	+40 16	8.07	8.05	B9	5	..	37397i	91	1328	20.3	+8 8	8.9	10.0	K2	1	..	38411b
42	1632	20.1	+39 2	7.8	8.1	Fo	4	..	37397i	92	1280	20.3	+7 50	8.9	8.9	Ao	2	..	38411b
43	..	20.1	+17 51	Neb.	Neb.	P	1	R	37579i	93	1278	20.3	+7 47	8.7	9.5	G5	2	..	38411b
44	1286	20.1	+14 9	7.4	7.7	Fo	4	0,6 R	38947i	94	1474	20.3	-12 49	9.9	9.9	Ao	3	..	24463b
45	..	20.1	+14 9	..	..	A2	..	..	..	95	1483	20.3	-13 10	7.9	8.5	Go	2	E	12672b
46	1242	20.1	+13 54	8.7	9.7	Ko	2	5,2	38200i	96	3261	20.3	-31 44	8.3	8.3	F8	3	..	10682b
47	1166	20.1	+11 17	7.6	8.6	Ko	2	..	37579i	97	2877	20.3	-35 46	8.7	9.1	Ko	3	..	20527b
48	1238	20.1	+3 54	8.9	8.9	Ao	3	..	15138b	98	2869	20.3	-36 58	6.95	6.7	B8	6	0,5-	9042b
49	1237	20.1	+3 4	8.8	9.6	G5	2	..	38205i	99	2282	20.3	-48 45	9.8	9.4	Ao	2	..	18483b
50	1332	20.1	+1 33	6.46	6.46	Ao	5	..	37595i	100	2191	20.3	-50 55	9.4	10.0	G5	1	..	20547b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

45100

6^h 20^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	523	20.3	-66 21	9.0	9.8	G5	2	..	18485b	51	1252	20.7	+ 4 29	8.3	8.3	B8	4	..	20708b
2	371	20.3	-73 41	10.7	10.8	A3	2	..	20652b	52	1414	20.7	+ 0 52	6.84	7.62	G5	4	5,8	37595i
3	385	20.3	-76 34	10.8	10.8	Ao	1	..	20652b	53	1501	20.7	- 4 46	7.9	7.9	B8	3	..	37595i
4	79	20.3	-86 54	8.6	9.4	G5	4	..	15145b	54	1516	20.7	-10 35	9.3	9.6	Fo	3	..	24463b
5	1299	20.4	+47 28	6.34	6.32	B9	7	E	37428i	55	1481	20.7	-12 11	8.5	8.9	F5	7	..	24463b
6	1289	20.4	+14 15	8.3	8.4	A2	3	..	37579i	56	1483	20.7	-17 47	9.3	9.9	Go	2	..	39861b
7	1334	20.4	+ 1 12	8.9	8.9	Ao	2	..	38196i	57	4005	20.7	-24 46	8.5	8.5	Ao	4	E	20535b
8	1424	20.4	- 8 40	8.5	9.6	K2	6	..	20803b	58	2875	20.7	-36 39	6.70	7.8	G5	..	0,4-	56,122
9	1476	20.4	-12 57	9.3	9.3	Ao	4	..	24463b	59	2285	20.7	-48 31	8.3	8.5	F5	4	..	18483b
10	1432	20.4	-14 27	8.1	9.1	Ko	4	..	12630b	60	573	20.7	-67 54	10.4	10.8	F5	2	R	15223b
11	3194	20.4	-25 26	8.5	9.6	Ma	..	..	M	61	244	20.8	+76 57	8.14	8.92	G5	3	..	37343i
12	2958	20.4	-27 17	7.9	8.7	F5	5	..	42904b	62	445	20.8	+66 41	9.2	9.8	Go	2	..	38155i
13	3265	20.4	-31 7	8.0	8.3	Ao	2	..	10682b	63	587	20.8	+64 31	8.2	8.7	F8	4	..	37545i
14	2870	20.4	-36 1	9.0	8.9	F5	5	..	20527b	64	1035	20.8	+54 49	8.46	9.02	Go	2	..	37408i
15	2799	20.4	-37 57	9.3	9.7	G5	2	..	20527b	65	1310	20.8	+50 36	9.5	9.5	A	1	..	37419i
16	2222	20.4	-49 33	8.5	9.4	Ko	2	..	20547b	66	1332	20.8	+ 8 3	9.6	..	Oe	1	..	38411b
17	555	20.4	-64 1	8.9	9.0	A5	4	..	18485b	67	1341	20.8	+ 1 45	9.1	10.1	Ko	1	..	38196i
18	494	20.4	-68 23	10.2	10.3	A2	2	..	18485b	68	1425	20.8	- 3 50	6.40	7.18	G5	5	..	37595i
19	386	20.4	-76 36	9.5	10.3	G5	2	..	20652b	69	1448	20.8	-21 54	8.1	7.9	A2	3	..	8904b
20	1106	20.5	+27 45	9.5	10.5	Ko	1	..	37440i	70	2883	20.8	-35 13	8.4	9.1	Ko	4	..	20527b
21	1418	20.5	+20 7	8.95	9.03	A3	2	..	37446i	71	2577	20.8	-39 39	7.86	8.8	K2	6	0,4	20527b
22	1148	20.5	+12 15	8.5	8.4	B5	3	..	37579i	72	2289	20.8	-48 49	9.0	10.0	G5	2	..	18483b
23	1329	20.5	+ 8 46	9.1	9.2	A5	1	..	38168i	73	1036	20.9	+54 41	7.71	8.49	G5	3	..	37408i
24	1456	20.5	- 9 2	7.36	8.36	Ko	4	..	12672b	74	1037	20.9	+54 27	8.5	8.6	A3	2	..	37408i
25	1512	20.5	-10 14	9.0	9.6	Go	4	..	24463b	75	1075	20.9	+52 31	7.20	7.98	G5	5	..	37408i
26	1513	20.5	-10 14	9.9	9.9	Ao	3	..	24463b	76	1226	20.9	+29 25	8.8	8.9	A5	3	..	37440i
27	1479	20.5	-12 19	9.5	10.3	G5	3	..	24463b	77	1276	20.9	+25 0	9.01	9.07	A2	2	..	37440i
28	1486	20.5	-13 9	10.2	10.2	Ao	3	..	24463b	78	1356	20.9	+23 48	8.6	8.7	A2	4	..	37446i
29	1439	20.5	-19 40	8.5	8.6	Go	4	5,3	12630b	79	1420	20.9	+20 30	8.4	8.7	Fo	4	..	37446i
30	1378	20.5	-20 21	9.5	9.4	Ao	1	..	12630b	80	1197	20.9	+15 35	6.71	6.69	B9	8	..	37579i
31	1379	20.5	-20 35	8.7	8.5	Ao	6	0,6	12630b	81	1427	20.9	- 3 51	9.3	9.3	Ao	2	..	20803b
32	2872	20.5	-36 48	11.4	9.5	A3	3	..	20527b	82	1482	20.9	-12 30	9.7	10.5	G5	2	..	24463b
33	2375	20.5	-46 46	8.3	8.6	G5	4	..	18483b	83	1411	20.9	-18 25	8.9	10.1	K5	2	..	12630b
34	1238	20.6	+21 41	8.8	9.4	Go	2	..	37446i	84	2981	20.9	-28 44	6.24	7.4	Go	10	..	42904b
35	1281	20.6	+ 7 32	8.7	8.8	A2	2	..	38168i	85	1885	20.9	-51 8	9.6	10.3	G	1	..	20547b
36	1251	20.6	+ 4 36	8.3	8.3	Ao	4	E	38171i	86	637	20.9	-61 33	8.8	10.4	Ko	2	..	15147b
37	1227	20.6	+ 2 19	6.28	6.26	B9	7	..	37595i	87	621	20.9	-62 20	8.7	9.0	Fo	4	..	15147b
38	1288	20.6	- 0 24	8.1	8.4	Fo	4	5,2	12671b	88	495	20.9	-68 38	9.7	9.7	Ao	3	..	18485b
39	1601	20.6	- 2 56	6.68	6.68	Ao	5	2,9	37595i	89	174	20.9	-80 16	8.7	9.2	F8	4	..	20557b
40	1515	20.6	-10 53	7.7	8.7	Ko	3	..	12672b	90	247	21.0	+77 59	7.54	7.54	Ao	7	..	37343i
41	1481	20.6	-11 31	9.1	9.7	Go	3	..	24463b	91	1077	21.0	+52 12	8.0	8.3	F2	4	..	37408i
42	1436	20.6	-14 21	9.1	9.1	B9	5	..	12630b	92	1300	21.0	+32 38	6.43	7.43	Ko	7	..	38126i
43	1377	20.6	-15 5	7.81	7.87	A2	8	..	12630b	93	1148	21.0	+16 31	8.9	8.9	A	1	..	37579i
44	4003	20.6	-24 7	9.0	9.0	F5	4	E	20535b	94	1250	21.0	+13 10	6.59	7.09	F8	7	..	37579i
45	2873	20.6	-36 40	5.72	7.1	G5	..	0,6	56,122	95	1287	21.0	+ 7 40	8.8	10.0	K5	1	..	38411b
46	602	20.6	-60 11	9.1	9.4	Ao	3	..	15147b	96	1236	21.0	- 1 45	8.3	8.6	Fo	5	..	12671b
47	1634	20.7	+39 54	8.47	9.25	G5	3	..	37397i	97	1489	21.0	-13 17	9.1	9.1	Ao	7	..	24463b
48	1264	20.7	+24 49	9.5	9.5	A	1	..	37440i	98	1475	21.0	-16 20	8.9	9.9	Ko	2	..	12630b
49	1244	20.7	+17 53	8.7	8.7	Ao	2	..	37579i	99	1404	21.0	-22 31	9.1	9.4	K2	1	..	20535b
50	1171	20.7	+11 3	8.4	8.5	A2	1	..	37579i	100	3270	21.0	-31 47	8.7	8.3	A2	3	..	10682b

THE HENRY DRAPER CATALOGUE.

45200

6^h 21^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2805	21.0	-37 29	9.8	10.0	Ko	1	..	20527b	51	1241	21.3	+21 22	7.7	8.5	G5	3	..	37446i
2	2628	21.0	-38 2	9.0	10.2	Ma	2	..	20527b	52	1295	21.3	+14 51	8.99	9.05	A2	1	..	37579i
3	529	21.1	+65 32	9.2	9.7	F8	2	..	37545i	53	1178	21.3	+11 43	8.3	8.9	Go	3	..	37579i
4	589	21.1	+64 57	9.25	9.81	G	3	R	37545i	54	1240	21.3	+9 8	8.4	8.4	Ao	4	..	38168i
5	970	21.1	+60 51	8.0	8.6	Go	2	..	37545i	55	1333	21.3	+8 42	8.3	9.3	Ko	1	..	38168i
6	1415	21.1	+35 24	8.2	9.2	Ko	2	..	38126i	56	1291	21.3	-0 28	9.3	9.4	A2	2	..	12671b
7	1228	21.1	+29 42	8.0	8.8	G5	4	..	37440i	57	1292	21.3	-0 43	7.6	7.6	B9	5	..	37595i
8	1278	21.1	+25 26	9.5	9.6	A2	2	..	37440i	58	1432	21.3	-3 31	9.1	9.2	A2	2	..	20803b
9	1330	21.1	+22 7	9.0	9.0	Ao	2	..	37446i	59	1423	21.3	-7 3	9.1	9.5	F5	2	..	20803b
10	1247	21.1	+17 31	7.9	8.5	Go	4	..	37579i	60	1458	21.3	-9 20	9.1	9.1	B8	2	..	12672b
11	1253	21.1	+4 10	7.9	8.9	Ko	4	0.4	38168i	61	1487	21.3	-11 25	9.9	10.2	Fo	1	..	24463b
12	1232	21.1	+2 23	7.7	8.8	K2	3	..	38196i	62	1485	21.3	-12 3	9.5	10.3	G5	2	..	24463b
13	1237	21.1	-1 30	8.9	10.0	K2	1	..	12671b	63	1487	21.3	-12 51	9.9	9.9	Ao	4	..	24463b
14	1605	21.1	-2 23	8.9	9.2	Fo	3	..	12671b	64	1451	21.3	-21 17	9.3	9.4	G5	1	..	20535b
15	1430	21.1	-3 28	6.54	7.32	G5	4	..	37595i	65	3208	21.3	-25 56	8.0	9.1	Ko	2	..	12656b
16	1542	21.1	-6 9	8.5	9.5	Ko	3	..	20803b	66	3006	21.3	-26 6	8.3	9.3	K2	2	..	12656b
17	1543	21.1	-6 18	9.1	9.7	Go	1	..	20803b	67	3007	21.3	-26 51	8.9	8.7	B9	4	..	42904b
18	1541	21.1	-6 29	9.1	9.9	G5	1	..	20803b	68	2885	21.3	-36 33	8.0	9.1	K5	4	..	20527b
19	1430	21.1	-8 21	8.3	9.3	Ko	6	..	20803b	69	1071	21.3	-53 23	8.4	9.0	Ko	4	..	20547b
20	1428	21.1	-8 44	9.3	10.1	G5	2	..	24463b	70	604	21.3	-60 10	6.57	7.4	Go	4	..	42927b
21	1431	21.1	-8 59	9.9	10.2	F2	2	..	24463b	71	971	21.4	+60 13	6.72	6.67	B8	8	..	37545i
22	1486	21.1	-11 11	9.1	9.7	Go	4	..	24463b	72	982	21.4	+59 9	9.4	10.8	Ma	..	..	M
23	1484	21.1	-11 16	9.1	9.1	Ao	2	..	12672b	73	1543	21.4	+43 34	8.5	8.9	F5	2	..	37500i
24	1485	21.1	-11 58	9.5	9.6	A5	3	..	24463b	74	1496	21.4	+38 22	8.4	8.5	A3	2	..	37397i
25	1483	21.1	-12 48	9.9	10.2	F2	2	..	24463b	75	1439	21.4	+36 7	8.5	8.5	Ao	3	..	38126i
26	1440	21.1	-14 4	8.5	8.5	B9	7	..	12630b	76	1270	21.4	+24 35	9.0	9.0	Ao	2	..	37440i
27	2807	21.1	-37 33	10.2	9.5	Fo	1	..	20527b	77	1242	21.4	+21 3	8.1	8.2	A3	4	..	37446i
28	2481	21.1	-45 54	7.5	8.3	Go	5	..	18483b	78	1335	21.4	+8 27	8.7	9.5	G5	1	..	38168i
29	1072	21.1	-56 19	5.72	6.3	Ao	8	R	42927b	79	1242	21.4	+6 25	8.9	8.9	Ao	3	..	38411b
30	372	21.1	-73 19	8.8	10.0	K5	5	..	20652b	80	1254	21.4	+4 53	8.25	9.25	Ko	3	2.3	38205i
31	531	21.2	+65 13	8.05	8.83	G5	4	..	37545i	81	1246	21.4	+3 40	8.9	9.5	Go	3	..	20708b
32	1497	21.2	+49 47	8.8	8.8	Ao	4	..	37500i	82	1247	21.4	+3 29	8.7	9.3	Go	2	0.2	38196i
33	1541	21.2	+43 8	9.4	10.2	G5	1	..	37397i	83	1239	21.4	-1 17	9.1	9.2	A3	2	..	12671b
34	1444	21.2	+41 52	9.2	10.4	K5	1	..	37397i	84	1424	21.4	-7 18	7.7	7.7	B8	9	..	20803b
35	1436	21.2	+36 17	7.7	8.3	Go	5	..	38126i	85	1522	21.4	-10 49	9.9	9.9	Ao	3	..	24463b
36	1416	21.2	+35 4	8.67	9.23	Go	2	..	38126i	86	1405	21.4	-22 52	9.0	8.8	Fo	4	..	20535b
37	1232	21.2	+30 43	6.89	7.89	Ko	4	..	38126i	87	2886	21.4	-36 19	10.9	9.4	Fo	2	..	20527b
38	1504	21.2	-4 34	8.5	8.5	Ao	5	..	12671b	88	2887	21.4	-36 35	9.4	9.1	A5	3	..	20527b
39	1422	21.2	-7 51	6.39	6.45	A2	3	0.10	10638b	89	2503	21.4	-42 49	6.76	7.4	G5	9	..	20555b
40	1443	21.2	-19 56	8.13	8.5	G5	4	5.3	12630b	90	2198	21.4	-50 10	8.74	9.1	F2	4	..	20547b
41	4011	21.2	-24 4	8.5	9.1	Ko	3	E	20535b	91	913	21.4	-52 8	5.89	7.5	G5	..	0.10	56,122
42	2985	21.2	-28 38	9.5	9.0	F5	2	..	42904b	92	578	21.4	-67 32	9.0	9.5	F8	2	..	18485b
43	2851	21.2	-34 3	8.4	8.9	Ko	3	2.1	20527b	93	373	21.4	-73 45	9.7	10.1	F5	3	..	20652b
44	2631	21.2	-38 13	8.1	9.4	K5	3	..	20527b	94	532	21.5	+65 32	8.4	8.9	F8	5	..	37545i
45	2442	21.2	-43 43	9.0	8.9	Ao	4	..	20555b	95	1039	21.5	+54 51	8.66	8.72	A2	2	..	37419i
46	430	21.2	-71 20	8.9	10.0	K2	2	..	15167b	96	1151	21.5	+16 31	8.9	9.0	A5	2	..	37579i
47	432	21.3	+67 25	9.2	10.0	G5	1	..	38155i	97	1248	21.5	+3 56	9.1	9.1	B9	2	..	20708b
48	1146	21.3	+46 25	8.4	8.7	Fo	3	..	37500i	98	1462	21.5	-9 59	7.96	8.02	A2	6	..	12672b
49	1351	21.3	+33 59	8.7	9.7	K	1	..	38126i	99	1488	21.5	-11 53	8.5	8.8	F2	5	..	24463b
50	1302	21.3	+32 56	8.5	8.8	F2	2	..	38126i	100	1479	21.5	-16 40	8.9	9.3	F5	4	..	12630b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

45300

6^h 21^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1478	21.5	-16 51	8.9	9.9	Ko	2	..	1263ob	51	1355	21.8	+34 33	7.62	7.70	A3	6	..	38126i
2	1418	21.5	-18 30	9.5	9.5	Ao	2	..	39861b	52	1427	21.8	+20 52	6.55	7.55	Ko	5	R	37446i
3	1417	21.5	-18 35	8.9	9.2	Fo	4	..	1263ob	53	1224	21.8	+18 18	7.5	7.9	F5	6	0,4	37579i
4	1384	21.5	-20 55	7.23	8.2	Ko	4	0,9	8904b	54	1140	21.8	+10 23	8.9	8.9	Ao	2	..	38200i
5	3276	21.5	-31 31	8.3	8.3	F2	3	..	10682b	55	1246	21.8	+ 6 35	8.3	9.5	K5	2	..	38411b
6	2440	21.5	-40 14	6.30	7.1	B9	8	..	18558b	56	1251	21.8	+ 3 27	8.3	9.1	G5	1	..	38196i
7	2504	21.5	-42 43	9.4	9.5	A	2	..	20555b	57	1421	21.8	+ 0 54	6.51	6.51	Ao	6	..	37595i
8	2389	21.5	-46 53	9.4	9.2	F8	2	..	18483b	58	1491	21.8	-12 15	10.4	10.8	F5	2	..	24463b
9	638	21.5	-61 4	8.1	9.1	F2	5	..	15147b	59	1493	21.8	-13 39	8.5	8.5	Ao	4	..	12672b
10	381	21.5	-74 35	10.8	10.9	A5	2	..	20652b	60	1492	21.8	-13 42	9.1	9.1	Ao	3	..	12672b
11	1635	21.6	+39 11	7.6	7.9	Fo	5	..	37397i	61	1421	21.8	-18 55	8.3	9.5	K5	2	..	1263ob
12	1514	21.6	+37 15	9.0	9.0	Ao	2	E	37397i	62	1455	21.8	-21 29	8.5	8.3	F2	5	..	20535b
13	1335	21.6	+22 11	9.4	9.4	B9	2	..	37446i	63	1457	21.8	-21 35	9.9	9.4	Ao	1	..	20535b
14	1296	21.6	+14 57	7.09	..	Oe5	5	..	38947i	64	3286	21.8	-31 25	7.9	8.6	Go	3	..	10682b
15	1255	21.6	+ 4 8	8.3	9.3	Ko	2	..	38168i	65	2584	21.8	-39 24	10.2	9.4	Ao	2	..	20527b
16	1250	21.6	+ 3 13	8.5	8.5	Ao	3	2,3	38196i	66	1075	21.8	-56 45	9.9	9.9	Ao	3	..	18484b
17	1418	21.6	+ 0 31	7.7	8.5	G5	3	..	37595i	67	509	21.8	-70 30	9.8	10.6	G5	2	..	15167b
18	1419	21.6	+ 0 30	8.9	9.7	G5	1	..	37595i	68	374	21.8	-73 3	9.3	10.5	K5	3	..	20652b
19	1295	21.6	- 1 1	8.3	8.3	Ao	3	..	37595i	69	179	21.8	-81 31	8.04	8.1	A2	8	..	20557b
20	1242	21.6	- 1 27	5.73	5.73	Ao	7	..	37595i	70	1306	21.9	+45 49	8.9	8.9	Ao	2	..	37500i
21	1510	21.6	- 4 32	6.07	5.90	B3	..	0,7	56,82	71	1558	21.9	+42 43	9.2	9.3	A3	1	..	37397i
22	1463	21.6	- 9 5	10.6	10.6	Ao	2	..	24463b	72	1613	21.9	+40 11	7.77	7.77	Ao	5	..	37397i
23	1488	21.6	-12 32	9.9	10.0	A2	5	..	24463b	73	1516	21.9	+37 27	8.4	8.8	F5	1	E	37397i
24	1381	21.6	-15 3	8.76	8.71	B8	5	..	1263ob	74	1329	21.9	+33 13	8.6	8.9	Fo	3	..	38126i
25	1382	21.6	-15 34	8.7	8.8	A5	6	..	1263ob	75	1304	21.9	+32 12	8.4	9.4	Ko	1	..	38126i
26	1481	21.6	-16 8	9.1	9.6	F8	3	..	1263ob	76	1362	21.9	+23 45	8.2	9.0	G5	3	..	37446i
27	1453	21.6	-21 24	9.1	8.9	F8	2	..	20535b	77	1244	21.9	+ 9 17	7.9	8.0	A2	5	..	38168i
28	3138	21.6	-30 50	7.9	9.2	F5	2	..	10682b	78	1293	21.9	+ 7 0	8.5	8.5	Ao	2	..	38168i
29	3278	21.6	-31 6	8.3	9.2	Ko	2	..	10682b	79	1298	21.9	- 0 59	8.2	8.5	Fo	2	..	37595i
30	2636	21.6	-39 0	9.0	10.9	Ao	1	..	20527b	80	1429	21.9	- 7 27	6.30	6.30	Ao	4	..	10638b
31	2390	21.6	-41 37	8.1	9.4	K2	4	..	20555b	81	1385	21.9	-20 32	9.3	9.1	Ao	3	0,3	1263ob
32	251	21.6	-77 4	8.7	9.7	Ko	4	..	20652b	82	3090	21.9	-29 39	6.72	7.0	Ao	5	0,7-	9042b
33	1128	21.7	+56 12	8.6	9.0	F5	2	..	37408i	83	2864	21.9	-35 1	6.24	7.1	Ko	8	5,3	20527b
34	1417	21.7	+35 6	8.52	8.60	A3	5	..	38126i	84	2640	21.9	-38 45	8.7	10.0	Ko	1	..	20527b
35	1328	21.7	+33 48	9.1	9.2	A3	1	..	38126i	85	1073	21.9	-56 3	8.6	9.0	G5	4	..	18484b
36	1231	21.7	+29 19	7.6	8.8	K5	2	..	37440i	86	432	21.9	-71 40	8.9	9.7	G5	4	..	15167b
37	1125	21.7	+28 41	8.8	8.8	Ao	2	..	37440i	87	222	21.9	-78 20	10.6	11.4	G5	3	..	20652b
38	1360	21.7	+23 31	10.2	10.2	Ao	2	..	37446i	88	1082	22.0	+55 54	8.6	9.4	G5	2	5,1	37408i
39	1256	21.7	+ 4 13	8.5	8.8	F2	2	..	38168i	89	1194	22.0	+51 27	8.0	8.0	Ao	4	..	37438i
40	1297	21.7	- 0 32	8.7	8.8	A5	3	R	12671b	90	1307	22.0	+45 29	10.2	10.3	A2	1	..	37500i
41	1434	21.7	- 8 42	8.9	9.0	A2	6	..	20803b	91	1442	22.0	+36 34	7.09	7.65	Go	7	..	38126i
42	1464	21.7	- 9 16	8.5	8.5	Ao	3	..	12672b	92	1420	22.0	+35 20	8.6	9.1	F8	4	..	38126i
43	1489	21.7	-11 13	9.9	10.5	Go	2	..	24463b	93	1356	22.0	+34 56	7.27	7.27	Ao	8	..	38126i
44	1490	21.7	-13 0	9.7	10.8	K2	2	..	24463b	94	1428	22.0	+20 34	6.11	6.11	Ao	..	0,7	56,82
45	2859	21.7	-34 20	8.7	8.8	G5	3	..	20527b	95	1254	22.0	+17 45	8.9	9.5	Go	2	..	37579i
46	2448	21.7	-43 21	8.5	9.2	G5	4	..	20555b	96	1343	22.0	+ 8 28	8.7	8.8	A2	2	..	38168i
47	2202	21.7	-50 29	7.6	8.2	Fo	8	..	20547b	97	1425	22.0	+ 0 12	7.9	7.9	B8	4	..	37595i
48	914	21.7	-52 38	0.86	0.58	Fo	..	R	28,198	98	1512	22.0	- 4 24	6.82	7.82	Ko	4	0,4	20804b
49	1456	21.8	+44 57	8.57	8.55	B9	2	..	37500i	99	1513	22.0	- 4 34	8.7	8.7	Ao	6	..	12671b
50	1637	21.8	+39 2	7.85	8.63	G5	3	..	37397i	100	1551	22.0	- 6 42	9.7	10.3	Go	1	..	20803b

THE HENRY DRAPER CATALOGUE.

45400

6^h 22^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
		m.	° ' "									m.	° ' "						
1	1490	22.0	-11 49	9.3	10.7	Ma	1	..	24463b	51	387	22.3	-76 36	8.6	9.4	G5	6	..	20652b
2	1494	22.0	-13 29	9.1	10.1	Ko	4	..	24463b	52	1228	22.4	+18 32	7.5	8.3	G5	3	..	37579i
3	1482	22.0	-16 40	9.3	9.4	A2	3	..	12630b	53	1302	22.4	+14 10	8.3	8.7	F5	2	..	37579i
4	1386	22.0	-20 7	7.58	8.9	Ma	4	0.3	12630b	54	1556	22.4	- 6 29	9.3	10.3	Ko	1	..	20803b
5	3851	22.0	-23 49	9.5	9.1	G5	1	..	20535b	55	1467	22.4	- 9 22	9.9	10.9	Ko	1	..	24463b
6	2895	22.0	-36 15	10.7	11.3	F8	3	..	20527b	56	1411	22.4	-22 36	9.3	9.9	K5	1	..	20535b
7	2446	22.0	-40 31	8.0	10.0	K5	1	..	20555b	57	1410	22.4	-22 51	9.1	8.8	F2	3	..	20535b
8	690	22.0	-58 8	8.9	9.3	Ko	5	..	18484b	58	3024	22.4	-26 14	8.5	9.0	Go	2	..	12656b
9	252	22.0	-77 51	10.4	11.2	G5	2	..	20652b	59	2896	22.4	-35 17	7.06	8.5	K5	6	..	20527b
10	932	22.1	+58 14	5.96	6.74	G5	8	..	37408i	60	2240	22.4	-49 9	8.6	8.8	A2	4	..	18483b
11	1083	22.1	+55 46	7.7	8.8	K2	2	..	38239i	61	561	22.4	-63 38	6.22	8.9	Ma	7	..	18485b
12	1238	22.1	+30 34	var.	var.	Go	..	2,8 R	56,82	62	547	22.4	-64 30	8.6	9.0	F5	5	..	18485b
13	1226	22.1	+18 53	7.7	8.0	Fo	4	..	37446i	63	374	22.4	-75 11	8.83	9.8	Ko	4	..	20652b
14	1345	22.1	+ 8 38	8.5	8.5	Ao	2	..	38168i	64	985	22.5	+59 35	9.5	9.8	Fo	1	..	38239i
15	1237	22.1	+ 2 58	5.77	6.55	G5	6	0.7	37595i	65	1083	22.5	+52 51	7.7	8.0	Fo	5	..	37408i
16	1426	22.1	+ 0 21	5.29	6.29	Ko	6	..	37595i	66	1149	22.5	+46 45	6.01	7.01	Ko	5	E	37428i
17	1613	22.1	- 3 0	9.1	10.3	K5	1	..	12671b	67	1306	22.5	+32 29	8.5	9.5	Ko	2	..	38126i
18	1514	22.1	- 4 17	6.88	6.76	B5	..	0.6	56,82	68	1121	22.5	+27 15	9.8	9.9	A2	2	..	37440i
19	1492	22.1	-12 3	9.9	9.9	Ao	4	..	24463b	69	1145	22.5	+10 4	9.1	9.2	A2	1	..	38200i
20	1450	22.1	-14 32	6.54	7.54	Ko	6	..	12672b	70	1300	22.5	- 0 33	8.5	8.6	A5	1	..	37595i
21	1385	22.1	-15 27	8.9	8.9	Ao	5	..	12630b	71	1615	22.5	- 2 22	9.1	9.2	A2	2	..	12671b
22	1483	22.1	-16 32	7.7	8.7	Ko	5	..	12630b	72	1438	22.5	- 8 52	9.1	9.1	Ao	3	..	20803b
23	3222	22.1	-25 38	8.5	9.1	F	2	..	12656b	73	1469	22.5	- 9 48	9.3	9.6	Fo	4	..	24463b
24	2868	22.1	-34 59	7.15	7.4	A3	4	0.10	9042b	74	1452	22.5	-14 7	9.5	9.5	Ao	5	..	24463b
25	2204	22.1	-50 2	8.64	8.8	Fo	7	..	20547b	75	1453	22.5	-14 37	9.0	9.0	Ao	2	..	12672b
26	1075	22.1	-53 31	8.9	9.6	Ko	2	..	20547b	76	1495	22.5	-17 35	9.3	9.4	A2	2	..	12630b
27	1117	22.2	+27 42	7.7	8.8	K2	1	..	38185i	77	1494	22.5	-17 55	9.1	9.1	Ao	3	..	12630b
28	1276	22.2	+24 45	8.4	8.4	Ao	2	..	38185i	78	1412	22.5	-22 33	10.2	9.4	Ao	3	..	20535b
29	1247	22.2	+21 13	8.1	8.1	Ao	6	..	37446i	79	3026	22.5	-26 3	7.76	9.4	Ma	1	..	12656b
30	1203	22.2	+15 46	8.1	8.1	B9	4	1.3	37579i	80	2818	22.5	-37 14	8.7	8.8	Fo	4	..	20527b
31	1243	22.2	+ 5 14	6.68	6.96	Fo	7	..	38168i	81	2647	22.5	-38 53	7.32	9.2	K5	5	..	20527b
32	1261	22.2	+ 4 48	9.3	9.4	A2	2	..	38168i	82	216	22.5	-79 10	10.2	11.2	Ko	4	..	20652b
33	1299	22.2	- 0 13	5.82	6.82	Ko	5	..	37595i	83	80	22.5	-86 23	8.6	9.6	Ko	3	..	15145b
34	1516	22.2	- 4 29	9.3	9.3	Ao	2	..	20803b	84	1332	22.6	+33 24	8.1	9.2	K2	2	..	38126i
35	1517	22.2	- 4 43	9.1	9.1	Ao	2	..	12671b	85	1287	22.6	+25 41	8.0	8.0	Ao	3	..	38185i
36	1492	22.2	-11 9	8.9	9.5	Go	5	..	24463b	86	1251	22.6	+21 39	9.4	9.5	A2	2	..	37446i
37	1447	22.2	-19 15	7.02	7.2	A2	3	0.9	42141b	87	1157	22.6	+16 18	9.1	9.7	Go	2	..	37579i
38	3223	22.2	-25 4	9.95	9.1	A2	2	..	12466b	88	1349	22.6	+ 8 20	8.5	9.3	G5	1	..	38168i
39	2894	22.2	-35 39	8.0	7.4	B9	3	1.9	9042b	89	1264	22.6	+ 4 52	8.85	8.85	Ao	2	..	38168i
40	2398	22.2	-46 27	8.9	9.2	Go	2	..	18483b	90	1302	22.6	- 0 48	8.2	8.3	A2	2	..	37595i
41	2396	22.2	-46 53	8.8	9.2	G5	2	..	18483b	91	1616	22.6	- 2 8	8.7	8.8	A2	3	..	12671b
42	850	22.3	+62 57	8.9	9.5	Go	2	..	37545i	92	1439	22.6	- 3 29	9.1	9.1	Ao	4	..	12671b
43	890	22.3	+61 25	8.0	8.8	G5	3	..	37545i	93	1438	22.6	- 3 49	9.1	9.2	A5	1	..	12671b
44	1641	22.3	+39 44	8.02	8.58	Go	4	..	37397i	94	1493	22.6	-11 46	8.9	8.9	Ao	7	..	24463b
45	1247	22.3	+ 9 41	7.7	7.8	A3	7	..	38168i	95	1494	22.6	-12 46	7.9	7.9	B9	3	..	12672b
46	1263	22.3	+ 4 16	9.6	9.6	Ao	2	..	20708b	96	1387	22.6	-15 4	8.66	9.73	K2	2	..	12630b
47	1528	22.3	-10 40	9.7	10.2	F8	2	..	24463b	97	1386	22.6	-15 51	9.3	9.7	F5	3	E	24463b
48	1484	22.3	-16 40	9.1	9.2	A3	3	..	12630b	98	1486	22.6	-16 56	8.6	8.6	B9	6	..	12630b
49	2398	22.3	-41 56	8.7	9.5	K2	3	..	20555b	99	1497	22.6	-17 20	9.3	9.3	Ao	3	..	12630b
50	692	22.3	-58 30	6.60	6.9	A2	6	2.10	42927b	100	1462	22.6	-21 51	9.5	9.4	K	1	..	20535b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

45500

6^h 22^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
		m.	° ' "									m.	° ' "						
1	2453	22.6	-40 55	6.70	7.5	A3	5	0,10	18558b	51	4043	23.0	-24 11	7.8	9.3	K5	2	..	20535b
2	1077	22.6	-53 14	8.9	9.6	Fo	4	..	20547b	52	3307	23.0	-31 49	7.9	8.3	Fo	5	..	10682b
3	529	22.6	-66 15	8.7	9.3	Go	4	..	18485b	53	2982	23.0	-33 22	7.31	7.7	G5	3	0,4-	9042b
4	1122	22.7	+27 2	6.49	6.91	F5	8	..	38185i	54	2405	23.0	-41 35	8.0	7.9	Ao	8	0,3	20555b
5	1369	22.7	+23 29	9.4	9.4	Ao	2	..	37446i	55	1897	23.0	-51 47	8.9	9.4	Ma	4	..	20547b
6	1159	22.7	+16 19	6.33	7.11	G5	7	..	37579i	56	641	23.0	-59 2	8.3	9.6	K2	3	0,3	15147b
7	1253	22.7	+5 59	7.5	8.3	G5	3	..	38168i	57	608	23.0	-60 14	6.02	6.02	Ao	9	..	42927b
8	1389	22.7	-20 9	8.43	9.4	Ko	2	5,1	12630b	58	..	23.0	-78 23	..	..	Ko	2	..	20652b
9	919	22.7	-52 45	6.26	8.2	Ko	5	..	20547b	59	223	23.0	-78 43	9.8	10.6	G5	6	..	20652b
10	590	22.8	+64 6	8.9	9.2	F	2	R	37545i	60	208	23.1	+79 40	6.52	6.52	Ao	9	..	37343i
11	1342	22.8	+22 36	9.0	9.6	Go	2	E	37446i	61	1085	23.1	+52 52	8.1	8.4	Fo	3	0,3	37419i
12	1149	22.8	+10 23	6.19	7.19	Ko	7	0,7	38168i	62	1645	23.1	+39 2	8.4	8.7	F2	3	..	37397i
13	1350	22.8	+8 45	8.3	9.3	Ko	1	..	38168i	63	1244	23.1	+1 58	6.29	6.27	B9	7	0,8	37595i
14	1254	22.8	+6 1	7.6	8.7	K2	2	..	38168i	64	1445	23.1	-4 0	9.3	9.3	Ao	3	..	12671b
15	1617	22.8	-2 35	8.1	8.1	B8	3	..	37595i	65	1529	23.1	-4 41	9.7	9.7	Ao	2	..	20803b
16	1522	22.8	-4 45	8.5	8.5	B9	4	..	12671b	66	1390	23.1	-15 14	7.37	7.32	B8	6	..	39861b
17	1523	22.8	-4 52	7.65	7.65	Ao	5	..	12671b	67	1392	23.1	-15 43	9.1	9.9	G5	3	E	24463b
18	1642	22.8	-5 53	9.1	9.7	Go	2	..	20803b	68	1395	23.1	-20 52	9.0	9.2	Ko	2	..	20535b
19	1557	22.8	-6 9	9.5	9.5	B9	4	..	20803b	69	1416	23.1	-22 33	9.5	9.4	G5	1	..	20535b
20	1439	22.8	-8 11	8.5	8.5	Ao	6	..	20803b	70	2596	23.1	-39 38	8.7	9.2	G5	4	..	20527b
21	1532	22.8	-10 41	9.5	10.1	Go	3	..	24463b	71	2648	23.1	-44 34	9.0	9.2	Ao	3	0,3	18483b
22	1388	22.8	-15 15	8.0	8.0	B9	5	..	39861b	72	2308	23.1	-48 7	5.94	5.92	B9	..	0,6 R	56,122
23	1498	22.8	-17 36	8.5	8.8	Fo	5	..	12630b	73	921	23.1	-52 9	8.6	9.1	F2	5	..	20547b
24	3031	22.8	-26 42	8.0	8.7	Fo	5	..	12656b	74	180	23.1	-81 23	9.4	10.0	Go	2	..	20557b
25	2821	22.8	-37 48	10.0	10.0	G	2	R	20527b	75	120	23.1	-83 44	7.6	8.6	Ko	7	..	20557b
26	2242	22.8	-49 33	8.3	8.2	A2	7	..	20547b	76	1031	23.2	+53 50	7.9	8.7	G5	4	..	37408i
27	604	22.8	-69 13	9.9	10.0	A2	2	..	18485b	77	1427	23.2	+35 41	8.7	9.8	K2	1	..	38126i
28	853	22.9	+62 50	7.58	8.58	Ko	5	..	37545i	78	1292	23.2	+25 23	8.4	9.2	G5	1	..	38185i
29	1424	22.9	+35 44	8.7	9.7	Ko	2	..	38126i	79	1343	23.2	+22 55	9.4	9.4	Ao	2	E	37446i
30	1249	22.9	+5 21	7.22	7.20	B9	6	..	38168i	80	1260	23.2	+17 49	7.53	8.09	Go	4	..	37579i
31	1524	22.9	-4 18	8.6	9.6	Ko	2	..	20803b	81	1268	23.2	+4 29	8.9	8.9	Ao	4	..	20708b
32	1644	22.9	-5 5	7.90	7.90	Ao	5	..	12671b	82	1444	23.2	-3 4	8.9	8.9	Ao	3	..	12682b
33	1433	22.9	-7 55	8.4	8.8	F5	5	..	20803b	83	1530	23.2	-4 50	8.4	8.4	B8	5	..	12671b
34	1473	22.9	-9 10	9.1	10.3	K5	1	..	20803b	84	1563	23.2	-6 35	9.7	9.8	A5	3	..	20803b
35	1392	22.9	-20 21	7.32	8.2	Ao	4	0,9	8904b	85	1564	23.2	-6 51	8.9	8.8	B5	5	..	20803b
36	1463	22.9	-21 29	7.9	7.9	Ao	5	..	8904b	86	1533	23.2	-10 24	9.3	10.7	Ma	1	..	24463b
37	2593	22.9	-39 26	9.0	8.8	A2	5	..	20527b	87	3884	23.2	-23 27	10.4	9.1	Fo	3	..	20535b
38	375	22.9	-75 39	7.9	8.9	Ko	7	..	20652b	88	3237	23.2	-25 48	6.04	6.6	F8	9	..	8904b
39	86	23.0	+86 3	9.0	9.5	F8	3	..	37546i	89	2651	23.2	-38 50	8.4	9.4	Ko	3	..	20527b
40	1446	23.0	+36 41	8.0	8.0	Ao	4	2,4	38941i	90	610	23.2	-60 11	8.62	9.3	Fo	5	..	15147b
41	1241	23.0	+29 33	8.0	8.1	A2	5	..	37440i	91	388	23.2	-76 41	9.6	10.6	Ko	2	..	20652b
42	1441	23.0	+20 17	4.06	3.94	B5	..	R	56,82	92	209	23.3	+79 13	8.0	8.1	A3	3	..	37343i
43	1305	23.0	+14 13	8.7	9.1	F5	2	..	37579i	93	1041	23.3	+54 57	8.11	8.89	G5	3	..	37408i
44	1352	23.0	+8 38	8.7	8.8	A2	2	..	38168i	94	1086	23.3	+52 51	8.5	8.6	A3	2	..	37419i
45	1267	23.0	+4 21	8.7	9.7	Ko	1	2,1	20708b	95	1463	23.3	+44 1	8.0	8.4	F5	3	..	37500i
46	1526	23.0	-4 42	4.98	4.81	B3	..	0,8	56,82	96	1520	23.3	+37 53	8.6	9.4	G5	2	E	37397i
47	1560	23.0	-6 13	9.0	9.0	B9	7	..	20803b	97	1261	23.3	+17 34	7.7	8.7	Ko	2	..	37579i
48	1456	23.0	-14 7	9.7	10.7	Ko	2	..	24463b	98	1250	23.3	+9 38	8.9	8.9	A	1	..	38168i
49	1415	23.0	-22 48	9.0	8.9	K2	3	..	20535b	99	1355	23.3	+8 15	8.9	8.9	Ao	2	..	38168i
50	3879	23.0	-24 1	10.2	9.6	Ao	3	..	20535b	100	1306	23.3	-0 39	8.4	8.8	F5	3	..	37595i

THE HENRY DRAPER CATALOGUE.

45600

6^h 23^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1447	23.3	- 3 23	9.1	9.1	Ao	3	..	12682b	51	1281	23.6	+ 24 33	9.4	9.5	A2	1	..	38185i
2	1434	23.3	- 7 26	8.5	8.5	Ao	7	..	20803b	52	1197	23.6	+ 11 1	8.1	9.3	K5	2	..	38200i
3	1457	23.3	- 14 30	9.7	10.1	F5	3	..	24463b	53	1249	23.6	+ 2 13	8.9	8.9	B9	3	..	20708b
4	1452	23.3	- 19 23	7.7	8.5	K2	6	3,3	12630b	54	1307	23.6	- 0 40	6.86	7.36	F8	5	..	37595i
5	1397	23.3	- 20 18	8.7	9.2	K5	3	5,1	12630b	55	1255	23.6	- 1 31	7.8	7.8	Ao	4	..	37595i
6	1396	23.3	- 20 23	9.0	8.5	Ao	5	1,7	20535b	56	1449	23.6	- 3 9	9.1	9.4	F2	4	..	12671b
7	1417	23.3	- 22 4	7.56	8.0	A5	4	..	8904b	57	1450	23.6	- 3 43	8.5	8.5	B9	3	..	37595i
8	4049	23.3	- 24 14	8.5	9.0	G5	4	..	20535b	58	1536	23.6	- 4 30	8.5	8.8	Fo	5	..	12671b
9	3240	23.3	- 25 41	8.9	9.0	Ko	1	..	12656b	59	1568	23.6	- 6 29	8.0	8.0	B8	8	..	20803b
10	3046	23.3	- 32 6	7.21	8.1	Go	5	..	10682b	60	1475	23.6	- 9 45	8.7	9.5	G5	7	..	24463b
11	2598	23.3	- 39 13	10.7	9.4	Ao	3	..	20527b	61	1536	23.6	- 10 4	9.5	10.1	Go	3	..	24463b
12	2247	23.3	- 49 50	8.2	8.2	Fo	6	..	20547b	62	1499	23.6	- 12 5	9.9	10.2	Fo	2	..	24463b
13	1900	23.3	- 51 5	9.0	9.1	F5	5	..	20547b	63	1491	23.6	- 16 4	9.1	9.1	Ao	3	..	39861b
14	996	23.3	- 55 40	7.2	7.8	F2	8	..	18484b	64	3178	23.6	- 30 44	8.7	9.2	Ko	1	..	18385b
15	1079	23.3	- 56 7	8.5	9.3	Ma	2	..	18484b	65	2989	23.6	- 33 3	8.7	8.6	Go	2	5,2	10682b
16	531	23.3	- 66 57	8.8	9.9	K2	3	..	18485b	66	2655	23.6	- 38 21	9.6	9.7	Ko	1	..	20527b
17	217	23.3	- 79 24	10.0	11.2	K5	3	..	20652b	67	2464	23.6	- 40 59	9.4	10.0	Ko	1	..	20555b
18	177	23.4	+ 82 12	6.39	6.45	A2	7	2,8	37546i	68	643	23.6	- 59 17	9.1	9.7	Ao	3	0,3	15147b
19	974	23.4	+ 60 49	8.6	8.6	Ao	3	..	37545i	69	607	23.6	- 69 56	5.56	7.6	K5	..	3,7 R	56,122
20	1395	23.4	+ 48 52	8.5	8.5	Ao	5	..	37500i	70	1464	23.7	+ 44 23	8.6	8.6	Ao	2	..	37500i
21	1152	23.4	+ 46 18	9.0	9.0	B9	3	..	37500i	71	1561	23.7	+ 42 51	8.6	8.6	Ao	2	..	37500i
22	1451	23.4	+ 41 28	6.62	6.57	B8	7	E	37500i	72	1275	23.7	+ 13 42	8.3	8.3	B9	5	..	37579i
23	1133	23.4	+ 28 51	8.0	8.0	Ao	6	..	38185i	73	1173	23.7	+ 12 37	8.3	8.4	A2	4	..	37579i
24	1129	23.4	+ 27 42	8.7	8.8	A2	3	..	37440i	74	1308	23.7	- 0 31	6.66	6.94	Fo	5	..	37595i
25	1251	23.4	- 1 6	9.1	9.2	A2	3	..	12671b	75	1436	23.7	- 7 12	9.1	10.1	Ko	2	..	20803b
26	1534	23.4	- 4 23	9.1	9.1	B8	3	..	20803b	76	1476	23.7	- 9 41	9.1	9.5	F5	3	..	24463b
27	1535	23.4	- 4 58	8.60	8.60	Ao	4	..	20803b	77	1500	23.7	- 13 0	7.46	7.22	Bop	7	R	20581b
28	1535	23.4	- 10 34	9.7	10.5	G5	1	..	24463b	78	1420	23.7	- 22 2	9.3	9.4	A2	2	..	20535b
29	1504	23.4	- 13 6	6.94	6.89	B8	4	1,8	8916b	79	3053	23.7	- 32 33	8.4	8.3	A5	5	2,4-	12657b
30	3175	23.4	- 30 25	9.0	9.0	A3	2	..	18385b	80	2837	23.7	- 37 50	6.51	6.9	Fo	6	2,7	18558b
31	3047	23.4	- 32 50	8.8	8.9	Ko	1	5,1	10682b	81	2469	23.7	- 44 1	7.1	7.3	Ao	9	..	20555b
32	2831	23.4	- 37 10	8.4	7.9	Ao	7	0,4	20527b	82	997	23.7	- 55 42	9.3	9.6	Fo	2	..	18484b
33	2526	23.4	- 42 36	9.1	9.1	F2	3	..	20555b	83	1080	23.7	- 56 9	8.5	9.0	K5	3	..	18484b
34	922	23.4	- 52 5	8.6	9.7	Ma	4	..	20547b	84	1081	23.7	- 56 47	8.6	9.6	K5	2	..	18484b
35	176	23.5	+ 82 30	8.9	9.9	Ko	2	..	38330i	85	253	23.7	- 77 17	9.4	9.7	Fo	5	..	20652b
36	1087	23.5	+ 55 42	8.0	9.0	Ko	3	..	37419i	86	177	23.7	- 80 58	9.0	10.1	K2	3	..	20557b
37	1548	23.5	+ 43 57	7.6	8.6	Ko	2	..	37500i	87	1129	23.8	+ 56 37	9.4	9.4	A	1	..	38239i
38	1193	23.5	+ 11 5	6.43	6.71	Fo	7	0,7-	37579i	88	1264	23.8	+ 17 3	7.9	8.7	G5	4	..	37579i
39	1258	23.5	+ 6 50	8.9	10.3	Ma	..	..	M	89	1437	23.8	+ 0 12	6.68	6.68	Ao	5	1,8	37595i
40	1567	23.5	- 6 12	10.2	10.3	A2	2	..	20803b	90	1452	23.8	- 3 23	10.3	10.3	A	2	..	12671b
41	1566	23.5	- 6 42	9.9	9.9	Ao	2	..	20803b	91	1537	23.8	- 4 16	9.3	9.3	Ao	2	..	12671b
42	1495	23.5	- 11 17	9.1	9.1	Ao	4	..	24463b	92	1441	23.8	- 8 24	7.7	8.0	F2	8	..	20803b
43	3890	23.5	- 23 44	9.2	8.5	Ao	2	..	8904b	93	1477	23.8	- 9 51	9.9	10.2	Fo	3	..	24463b
44	3038	23.5	- 26 1	8.9	8.7	B8	3	..	12656b	94	1541	23.8	- 10 20	9.1	10.1	Ko	2	..	24463b
45	3177	23.5	- 30 49	8.7	9.5	K2	1	..	18385b	95	1507	23.8	- 13 45	9.3	9.3	B9	4	..	24463b
46	2987	23.5	- 33 22	9.4	8.9	F5	1	..	12657b	96	1459	23.8	- 14 59	9.5	9.5	Ao	4	..	24463b
47	1080	23.5	- 53 3	9.1	9.6	Ao	4	..	20547b	97	1470	23.8	- 21 43	8.1	8.9	K5	3	..	20535b
48	176	23.5	- 80 42	9.1	9.4	F2	5	..	20557b	98	2838	23.8	- 37 3	8.4	8.2	A2	6	2,2	20527b
49	1504	23.6	+ 49 32	9.0	9.3	F2	2	..	37438i	99	2835	23.8	- 37 29	10.4	8.9	A2	3	..	20527b
50	1311	23.6	+ 32 51	8.7	9.8	K2	1	..	38126i	100	998	23.8	- 55 6	9.1	9.4	Go	3	..	18484b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

45700

6^h 23^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	568	23.8	-63 22	6.46	7.5	Go	8	..	18485b	51	588	24.1	-65 37	8.1	8.4	Fo	8	..	18485b
2	257	23.9	+75 39	8.87	9.43	Go	2	..	37343i	52	224	24.1	-78 29	9.5	9.8	Fo	6	..	20652b
3	649	23.9	+63 14	8.8	8.8	Ao	4	..	37545i	53	1316	24.2	+50 43	8.2	8.7	F8	4	..	37500i
4	1042	23.9	+54 51	8.06	8.20	A5	3	5,3-	37419i	54	1371	24.2	+34 55	8.32	9.10	G5	2	..	38126i
5	1130	23.9	+27 1	9.1	9.4	Fo	1	..	37440i	55	1299	24.2	+25 13	8.8	8.9	A3	2	..	38185i
6	1306	23.9	+7 35	8.1	8.9	G5	2	..	38168i	56	1264	24.2	+21 45	8.8	9.6	G5	2	..	37446i
7	1363	23.9	+1 26	8.4	8.5	A2	4	..	12671b	57	1268	24.2	+17 59	7.33	7.33	Ao	6	0,5	37579i
8	1624	23.9	-2 26	8.1	9.1	Ko	3	..	12671b	58	1153	24.2	+10 44	7.7	8.1	F5	3	E	38168i
9	1570	23.9	-6 54	8.7	8.7	B9	9	..	20803b	59	1359	24.2	+8 34	7.5	8.0	F8	3	..	38168i
10	1442	23.9	-8 59	8.9	8.9	Ao	5	..	20803b	60	1274	24.2	+4 20	7.9	7.9	Ao	6	..	38196i
11	1542	23.9	-10 57	10.2	11.0	G5	1	..	24463b	61	1650	24.2	-5 28	9.1	9.2	A5	4	..	20803b
12	1498	23.9	-11 52	9.0	10.0	Ko	3	..	24463b	62	1649	24.2	-5 30	8.7	9.3	Go	5	..	20803b
13	1396	23.9	-15 18	9.1	9.9	G5	4	..	24463b	63	1479	24.2	-9 34	9.3	9.3	Ao	4	..	24463b
14	1493	23.9	-16 41	10.2	10.3	A2	2	E	24463b	64	1500	24.2	-11 12	7.7	7.7	B8	6	0,2	12672b
15	1456	23.9	-19 44	7.54	8.6	Ko	5	0,7	20535b	65	1506	24.2	-17 24	5.94	6.72	G5	10	..	12630b
16	2411	23.9	-41 16	8.7	9.1	Ko	4	..	20555b	66	121	24.2	-83 29	8.4	8.7	F2	8	..	20557b
17	2657	23.9	-44 55	9.40	10.7	F8	1	..	18483b	67	533	24.3	+65 21	7.55	7.89	F2	7	..	37545i
18	923	23.9	-52 18	10.0	10.3	Fo	3	..	20547b	68	1301	24.3	+25 46	9.4	9.4	A	1	..	38185i
19	925	23.9	-52 36	8.1	8.2	B9	7	R	20547b	69	1352	24.3	+22 37	6.83	6.83	Ao	7	E	37446i
20	1649	24.0	+39 50	6.61	6.61	Ao	9	..	37397i	70	1276	24.3	+4 33	9.3	9.3	B8	2	..	20708b
21	1138	24.0	+28 17	6.85	6.91	A2	7	..	38185i	71	1442	24.3	+0 16	8.8	9.8	Ko	1	..	12671b
22	1267	24.0	+17 41	7.7	7.8	A2	6	..	37579i	72	1453	24.3	-3 5	8.9	10.1	K5	1	..	12671b
23	1258	24.0	+5 14	10.3	10.3	Ao	1	..	20708b	73	1651	24.3	-5 40	9.1	10.1	Ko	2	..	20803b
24	1253	24.0	+2 43	6.39	7.74	Ma	6	0,4	38196i	74	1481	24.3	-9 47	9.9	10.3	F5	3	..	24463b
25	1574	24.0	-6 58	4.73	4.54					75	1546	24.3	-10 16	8.5	9.5	Ko	5	..	24463b
26		24.0	-6 58	5.22	5.03	B2p	..	1,8 R	2327c	76	..	24.3	-11 59	..	..	A2	2	..	24463b
27	1575	24.0	-6 58	5.60	5.41					77	1458	24.3	-19 37	8.9	8.9	Ao	4	0,3	12630b
28	1443	24.0	-8 24	8.3	8.3	B9	8	..	20803b	78	1404	24.3	-20 8	8.13	8.8	G5	4	5,3	12630b
29	1478	24.0	-9 20	9.1	9.1	Ao	4	..	24463b	79	609	24.3	-69 24	9.7	10.0	Fo	3	..	18485b
30	1543	24.0	-10 10	9.01	8.96	B8	5	..	24463b	80	989	24.4	+59 0	8.2	9.3	K2	1	..	38239i
31	1544	24.0	-10 16	9.3	9.3	Ao	7	..	24463b	81	1313	24.4	+45 48	9.2	9.2	Ao	2	..	37500i
32	1545	24.0	-10 35	9.5	9.5	A	1	..	24463b	82	1565	24.4	+42 41	9.2	9.2	Ao	1	..	37397i
33	1503	24.0	-12 59	7.36	7.42	A2	4	..	12672b	83	1316	24.4	+32 53	8.1	9.5	Ma	2	..	38126i
34	1461	24.0	-14 47	9.3	9.3	Ao	4	..	24463b	84	1248	24.4	+29 53	8.06	8.34	Fo	3	E	37440i
35	1473	24.0	-21 56	7.9	8.8	K5	4	..	20535b	85	1449	24.4	+20 12	9.0	9.6	G	2	E	37441i
36	3318	24.0	-31 52	8.7	9.2	Ko	1	..	18385b	86	1169	24.4	+16 2	8.9	9.2	F	2	..	37579i
37	2606	24.0	-39 35	8.2	9.5	K5	3	..	20527b	87	1315	24.4	+14 34	7.9	8.3	F5	4	..	37579i
38	2660	24.0	-44 4	7.6	8.3	F2	6	..	20555b	88	1312	24.4	+7 12	8.3	9.1	G5	2	R	38168i
39	927	24.0	-52 57	9.5	10.3	G5	3	..	20547b	89	1314	24.4	+7 12	7.9	7.7	B3	7	0, R	38168i
40	698	24.0	-58 34	8.7	9.6	G5	3	..	18484b	90	1628	24.4	-2 8	9.1	9.2	A5	2	..	37595i
41	634	24.0	-62 47	8.8	8.9	A3	7	..	15147b	91	1463	24.4	-14 3	9.9	9.9	Ao	2	..	24463b
42	936	24.1	+58 50	9.2	10.2	Ko	3	..	38239i	92	1464	24.4	-14 11	10.6	10.9	Fo	3	..	24463b
43	1043	24.1	+54 55	7.61	8.11	F8	4	0,4	37408i	93	1465	24.4	-14 31	10.4	10.7	Fo	3	..	24463b
44	1506	24.1	+49 32	8.4	8.7	F2	3	..	37500i	94	3195	24.4	-30 31	9.3	9.5	F8	1	..	18385b
45	1314	24.1	+32 51	8.5	9.3	G5	2	..	38126i	95	2663	24.4	-44 7	8.0	8.3	A2	5	..	20555b
46	1499	24.1	-11 34	8.6	8.7	A2	2	..	12672b	96	572	24.4	-63 46	6.36	5.8	B5	10	..	18485b
47	1462	24.1	-14 3	9.7	10.9	K5	2	..	24463b	97	514	24.4	-70 53	7.9	8.0	A2	2	2,10	9062b
48	3012	24.1	-27 5	7.9	8.4	B9	4	..	8904b	98	1089	24.5	+55 41	8.6	8.7	A2	4	..	37408i
49	3128	24.1	-30 0	8.65	9.2	K2	1	..	18385b	99	1549	24.5	+43 47	8.0	8.8	G5	2	..	37500i
50	2421	24.1	-46 56	8.4	8.9	F5	7	..	18483b	100	1302	24.5	+25 57	8.6	9.6	Ko	1	..	38185i

THE HENRY DRAPER CATALOGUE.

45800

6^h 24^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1380	24.5	+23 37	8.8	8.8	Ao	3	E	37446i	51	1454	24.8	+20 30	8.0	8.0	Ao	5	0,3	37441i
2	..	24.5	+7 57	..	..	A	2	..	38168i	52	1260	24.8	+2 51	9.1	9.1	Ao	2	..	38196i
3	1631	24.5	-2 47	8.7	8.7	B8	2	..	37595i	53	1370	24.8	+1 24	8.5	8.6	A2	5	..	12671b
4	1448	24.5	-8 2	8.6	10.0	Ma	3	..	20803b	54	1582	24.8	-6 49	9.9	10.2	Fo	2	..	20803b
5	1483	24.5	-9 8	7.5	8.7	K5	8	..	20803b	55	1438	24.8	-7 17	8.1	9.2	K2	5	..	20803b
6	1503	24.5	-11 10	9.9	10.2	F2	2	..	24463b	56	1489	24.8	-9 39	9.7	9.7	B9	3	..	24463b
7	1502	24.5	-11 36	9.9	11.1	K5	1	..	24463b	57	1506	24.8	-11 23	7.9	8.0	A2	6	2,2	12672b
8	1501	24.5	-11 54	10.6	11.4	G5	2	..	24463b	58	1467	24.8	-14 8	8.5	8.5	B8	4	..	12672b
9	1511	24.5	-13 25	9.9	10.3	F5	2	..	24463b	59	1436	24.8	-18 51	9.0	9.5	F8	3	..	12630b
10	1399	24.5	-15 47	9.1	9.4	Fo	3	..	39861b	60	3021	24.8	-27 36	8.7	9.1	Ao	3	..	12656b
11	1498	24.5	-16 5	9.3	9.3	Ao	2	..	39861b	61	3024	24.8	-27 56	7.7	9.1	K2	3	..	12656b
12	1459	24.5	-19 59	8.38	9.4	K5	2	3,1	12630b	62	3043	24.8	-28 10	8.7	9.4	Ko	1	..	12656b
13	3066	24.5	-32 31	4.48	4.36	B5	..	0, R	28,198	63	2671	24.8	-44 58	9.74	9.5	A	1	..	18483b
14	2516	24.5	-45 2	8.50	8.6	F5	4	..	18483b	64	225	24.8	-78 56	10.5	10.8	Fo	5	..	20652b
15	2367	24.5	-47 46	8.3	8.3	A2	7	..	18483b	65	82	24.8	-85 39	8.3	8.6	F2	3	..	15145b
16	999	24.5	-57 22	9.1	9.6	A2	2	..	18484b	66	227	24.9	+78 4	5.88	6.88	Ko	8	..	37343i
17	636	24.5	-62 22	7.9	8.2	Fo	6	..	15147b	67	1156	24.9	+10 12	8.08	8.14	A2	3	..	38168i
18	555	24.5	-64 51	9.9	9.9	Ao	2	..	18485b	68	1443	24.9	+0 25	8.3	8.6	Fo	3	..	38196i
19	512	24.5	-68 33	8.6	10.0	Mb	2	..	18485b	69	1400	24.9	-15 9	9.5	10.6	K2	2	..	24463b
20	376	24.5	-75 4	8.13	8.3	F8	8	..	20652b	70	1510	24.9	-17 58	9.3	9.3	Ao	2	..	12630b
21	322	24.6	+72 6	7.79	8.35	Go	3	..	37343i	71	3072	24.9	-32 18	5.80	5.63	B3	..	2,8	28,198
22	1373	24.6	+34 51	9.07	9.07	A	2	E	38126i	72	2370	24.9	-47 55	8.5	9.5	Ma	2	..	18483b
23	1337	24.6	+33 50	7.8	9.0	K5	3	..	38126i	73	618	24.9	-60 12	8.4	9.0	Fo	5	..	15147b
24	1254	24.6	+26 43	8.0	9.0	Ko	2	..	38185i	74	376	24.9	-73 17	9.2	10.3	K2	3	..	20652b
25	1451	24.6	+20 49	8.6	8.7	A2	2	..	37441i	75	258	25.0	+75 46	7.82	8.32	F8	4	..	37343i
26	1237	24.6	+18 2	7.6	8.4	G5	3	..	37579i	76	436	25.0	+67 9	9.2	9.2	Ao	3	..	38155i
27	1259	24.6	+9 6	6.48	6.48	Aop	8	R	38168i	77	591	25.0	+64 42	9.2	9.2	A	2	..	37545i
28	1366	24.6	+8 22	8.7	8.7	A	2	R	38168i	78	991	25.0	+59 32	8.8	9.6	G5	1	..	38239i
29	1367	24.6	+7 59	6.79	7.86	K2	3	..	38168i	79	1268	25.0	+21 53	8.1	8.9	G5	4	E	37446i
30	1309	24.6	-0 2	8.48	8.48	Ao	3	..	38196i	80	1445	25.0	+0 50	8.84	9.40	Go	2	..	12671b
31	1456	24.6	-3 29	7.8	8.6	G5	3	..	37595i	81	1655	25.0	-5 30	9.1	9.1	Ao	5	..	20803b
32	1484	24.6	-9 51	9.1	10.5	Ma	2	..	24463b	82	1439	25.0	-7 25	9.7	10.0	Fo	2	..	20803b
33	1547	24.6	-10 21	8.9	9.9	Ko	4	..	24463b	83	1490	25.0	-9 15	9.1	10.1	Ko	3	..	24463b
34	2416	24.6	-41 5	7.4	8.2	Ko	7	..	20555b	84	1506	25.0	-12 7	9.3	10.1	G5	4	..	24463b
35	637	24.6	-62 7	8.5	8.5	B9	5	..	15147b	85	1505	25.0	-12 55	9.3	10.3	Ko	3	..	24463b
36	1206	24.7	+51 3	7.76	8.76	Ko	4	..	37500i	86	1468	25.0	-14 25	10.4	11.4	Ko	3	..	24463b
37	1170	24.7	+16 48	8.8	8.9	A5	3	..	37579i	87	1402	25.0	-15 3	9.3	9.3	Ao	2	..	12672b
38	1319	24.7	+14 57	8.29	8.37	A3	4	..	37579i	88	1401	25.0	-15 28	10.3	10.3	A	1	..	24463b
39	1266	24.7	+6 58	8.3	8.3	Ao	2	..	38168i	89	1512	25.0	-17 45	7.9	7.9	Ao	7	..	12630b
40	1581	24.7	-6 59	9.1	9.2	A2	4	..	20803b	90	3074	25.0	-32 47	10.9	7.8	Ao	5	1,2	12657b
41	1486	24.7	-9 28	8.7	9.0	Fo	7	..	24463b	91	2670	25.0	-38 49	9.4	9.4	Ao	2	..	20527b
42	1505	24.7	-11 43	9.1	9.9	G5	6	..	24463b	92	930	25.0	-52 53	8.5	9.7	Ko	6	..	20547b
43	2893	24.7	-34 19	8.0	9.5	K2	2	..	12657b	93	1038	25.0	-54 58	8.43	8.4	Ao	6	..	18484b
44	1086	24.7	-53 31	8.1	9.0	Fo	5	..	20547b	94	643	25.0	-61 34	9.6	10.8	K5	1	..	15147b
45	575	24.7	-63 15	9.1	9.9	G5	2	..	15147b	95	515	25.0	-70 8	7.89	8.2	Fo	7	0,3	18485b
46	590	24.7	-65 27	8.8	9.8	Ko	3	..	18485b	96	478	25.0	-72 19	9.4	9.7	Fo	5	..	20652b
47	591	24.7	-65 43	9.0	10.1	K2	2	..	18485b	97	356	25.1	+71 25	8.2	8.2	Ao	2	..	37343i
48	1524	24.8	+37 15	6.66	7.66	Ko	7	..	38126i	98	981	25.1	+57 7	8.8	8.9	A2	3	..	37408i
49	1319	24.8	+32 12	8.2	9.2	Ko	2	..	38126i	99	1320	25.1	+32 14	6.91	6.89	B9	7	E	37527i
50	1294	24.8	+24 27	8.8	9.2	F5	2	..	38185i	100	1270	25.1	+21 48	8.7	9.0	Fo	5	E	37446i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

45900

6^h 25^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1262	25.1	+ 2 55	8.8	8.6	B	3	R	20708b	51	1275	25.4	+17 1	6.19	7.19	Ko	8	..	37579i
2	1459	25.1	- 3 9	9.0	9.3	Fo	4	..	12671b	52	1314	25.4	- 0 13	8.7	9.9	K5	2	3,2	20708b
3	1550	25.1	-10 53	9.3	9.4	A5	3	R	24463b	53	1585	25.4	- 6 22	7.7	7.7	B9	8	..	20803b
4	3271	25.1	-25 49	8.0	8.7	Ko	5	..	12656b	54	1440	25.4	- 7 40	8.5	8.6	A3	7	..	20803b
5	2923	25.1	-35 12	9.0	8.5	Ao	6	..	20527b	55	1552	25.4	-10 41	8.3	9.1	G5	2	..	12672b
6	2674	25.1	-44 32	8.9	9.2	Fo	2	..	18483b	56	1510	25.4	-11 40	9.1	9.1	Ao	6	..	24463b
7	931	25.1	-52 43	9.1	10.3	Ko	3	..	20547b	57	1515	25.4	-13 4	10.8	10.8	Ao	1	..	24463b
8	254	25.1	-77 18	10.4	10.9	F8	1	..	20652b	58	..	25.4	-14 30	..	..	K5	1	..	24463b
9	1452	25.2	+36 41	7.8	7.9	A5	3	..	38126i	59	1405	25.4	-15 13	9.9	10.9	Ko	2	..	24463b
10	1267	25.2	+ 5 57	6.70	6.53	B3	5	..	38168i	60	1406	25.4	-16 0	9.1	9.4	Fo	4	..	39861b
11	1282	25.2	+ 4 25	7.9	7.7	B3	7	..	38196i	61	1513	25.4	-17 19	9.1	9.1	Ao	1	..	39861b
12	1266	25.2	+ 3 1	8.8	9.3	F8	3	..	20708b	62	1479	25.4	-21 40	9.1	8.8	Ao	3	..	20535b
13	1449	25.2	+ 0 2	8.08	9.15	K2	2	..	38196i	63	2677	25.4	-38 15	8.0	8.3	Fo	6	0,5-	20527b
14	1462	25.2	- 3 43	8.9	9.2	Fo	3	..	12671b	64	2623	25.4	-39 43	8.7	8.8	Go	2	..	12657b
15	1454	25.2	- 8 14	8.7	8.7	Ao	5	..	20803b	65	2528	25.4	-45 38	8.4	8.6	A3	5	..	18483b
16	1500	25.2	-16 57	7.00	6.98	B9	7	..	39861b	66	81	25.4	-86 16	8.9	9.9	Ko	2	..	15145b
17	1439	25.2	-18 53	9.5	9.6	A3	2	..	12630b	67	406	25.5	+70 35	7.72	7.78	A2	3	..	37343i
18	3922	25.2	-23 56	8.7	8.6	A2	5	..	20535b	68	..	25.5	+64 9	var.	var.	Md	..	R	56,199
19	3056	25.2	-26 3	8.0	9.4	K5	1	..	12656b	69	1156	25.5	+46 41	9.0	9.4	F5	1	..	37500i
20	2676	25.2	-44 44	9.1	9.5	A5	2	0,2-	45973b	70	1379	25.5	+34 40	8.2	9.3	K2	2	..	38126i
21	2523	25.2	-45 33	8.3	8.9	F2	4	..	18483b	71	1174	25.5	+16 23	7.9	8.7	G5	3	..	37579i
22	2375	25.2	-48 0	9.1	9.8	K2	1	..	18483b	72	1271	25.5	+ 5 51	8.5	8.5	Ao	2	..	38168i
23	1088	25.2	-53 30	7.9	8.4	Fo	7	..	20547b	73	1315	25.5	- 0 20	8.9	9.0	A2	2	..	12671b
24	705	25.2	-58 10	8.1	8.4	F5	6	..	18484b	74	1639	25.5	- 2 57	7.06	7.84	G5	3	..	37595i
25	385	25.2	-74 7	9.8	10.1	F2	5	..	20652b	75	1546	25.5	- 4 38	8.3	8.3	B9	4	..	37595i
26	442	25.3	+68 42	8.8	9.3	F8	4	..	38155i	76	1493	25.5	-10 1	6.13	7.13	Ko	7	..	12672b
27	1476	25.3	+44 18	8.6	9.1	F8	2	..	37500i	77	1512	25.5	-11 46	9.1	10.1	Ko	3	..	24463b
28	1342	25.3	+33 40	9.1	9.2	A2	2	..	38126i	78	1473	25.5	-14 22	9.7	10.0	Fo	4	..	24463b
29	1142	25.3	+28 28	8.0	8.0	Ao	3	..	38185i	79	1407	25.5	-15 40	8.1	9.1	Ko	3	..	39861b
30	1321	25.3	+ 7 29	8.7	8.7	Ao	2	..	38168i	80	1444	25.5	-18 27	8.7	8.8	A3	4	..	12630b
31	1312	25.3	- 0 19	8.7	8.7	Ao	3	R	20708b	81	1409	25.5	-20 10	8.08	8.3	A2	6	2,7	20535b
32	1638	25.3	- 2 39	9.1	9.4	Fo	2	..	12671b	82	2854	25.5	-37 16	8.4	9.4	Ma	3	..	20527b
33	1463	25.3	- 3 10	9.3	9.6	F2	2	..	12671b	83	2482	25.5	-41 1	6.36	6.9	F2	7	..	18558b
34	1464	25.3	- 3 54	9.5	9.6	A5	2	..	12671b	84	1001	25.5	-57 56	5.73	7.2	Ko	10	..	18484b
35	1659	25.3	- 5 12	9.7	9.8	A2	3	..	20803b	85	561	25.5	-64 16	8.8	9.2	F5	3	..	18485b
36	..	25.3	- 9 15	..	..	F2	2	..	24463b	86	594	25.5	-67 26	9.2	9.5	Fo	3	..	18485b
37	1551	25.3	-10 46	9.1	9.2	A2	4	..	24463b	87	515	25.5	-68 44	8.6	9.4	G5	3	..	18485b
38	1508	25.3	-11 34	10.6	10.7	A3	2	..	24463b	88	255	25.5	-77 16	9.9	10.9	Ko	1	..	20652b
39	1471	25.3	-14 18	8.7	8.7	Ao	2	..	12672b	89	994	25.6	+59 17	8.6	9.8	K5	1	..	38239i
40	1403	25.3	-15 7	9.06	10.13	K2	3	..	24463b	90	1045	25.6	+54 9	9.0	9.1	A2	3	..	37419i
41	1429	25.3	-22 32	6.69	6.8	A2	7	0,7	8902b	91	1509	25.6	+49 40	8.9	8.9	A	1	..	37438i
42	3059	25.3	-26 26	8.7	8.7	Ao	5	0,2	12656b	92	1566	25.6	+42 2	8.7	8.8	A3	2	..	37500i
43	2675	25.3	-38 30	9.0	9.7	G5	2	..	20527b	93	1277	25.6	+17 29	7.33	8.33	Ko	4	0,2	37579i
44	2524	25.3	-45 17	8.6	8.6	A5	5	..	18483b	94	1221	25.6	+15 48	7.8	8.6	G5	2	..	37579i
45	706	25.3	-58 46	8.6	10.5	K2	2	..	18484b	95	1204	25.6	+11 19	5.83	5.59	Bo	8	E	37579i
46	707	25.3	-58 58	8.3	9.0	Go	5	5,5	15147b	96	1286	25.6	+ 4 43	8.9	8.9	Ao	2	..	20708b
47	340	25.4	+73 46	6.22	6.56	F2	8	..	37343i	97	1263	25.6	+ 2 36	8.5	9.5	Ko	2	..	38196i
48	438	25.4	+67 50	10.2	11.0	G5	1	..	38155i	98	1547	25.6	- 4 41	9.1	9.2	A2	2	..	20803b
49	1035	25.4	+53 43	9.2	9.7	F8	2	..	37419i	99	1507	25.6	-12 18	8.1	9.1	Ko	2	..	12672b
50	1310	25.4	+47 1	7.14	8.32	K5	5	..	37500i	100	1518	25.6	-13 27	9.5	10.3	G5	2	..	24463b

THE HENRY DRAPER CATALOGUE.

46000

6^h 25^m 6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1517	25.6	-13 43	9.1	9.4	Fo	5	..	24463b	51	1345	26.0	+33 34	8.6	8.7	A2	3	..	38126i
2	2680	25.6	-44 17	8.9	8.6	B9	5	..	18483b	52	1324	26.0	+32 31	5.98	5.98	Ao	8	..	37527i
3	1130	25.7	+56 44	9.2	9.3	A3	2	..	37408i	53	1258	26.0	+29 26	8.8	8.8	A	2	E	37440i
4	1343	25.7	+33 46	9.1	9.1	A	2	E	38126i	54	1261	26.0	+26 15	8.2	8.3	A2	4	..	38185i
5	1159	25.7	+10 0	7.65	7.60	B8	3	..	38200i	55	1327	26.0	+7 53	8.5	9.3	G5	3	..	38168i
6	1288	25.7	+4 35	8.1	9.1	Ko	3	..	38196i	56	1291	26.0	+4 54	7.96	7.72	Bo	4	..	20708b
7	1495	25.7	-9 20	9.7	10.1	F5	3	..	24463b	57	1290	26.0	+4 42	8.8	8.8	Ao	3	..	20708b
8	1555	25.7	-10 31	8.6	8.9	Fo	4	..	12672b	58	1549	26.0	-4 14	9.1	9.7	Go	2	..	20803b
9	1483	25.7	-21 27	9.1	9.2	Ko	1	..	20535b	59	1662	26.0	-5 49	9.1	9.9	G5	1	..	20803b
10	3155	25.7	-29 26	9.5	8.9	Ao	3	..	18385b	60	1498	26.0	-9 36	8.6	8.6	B8	2	R	12672b
11	562	25.7	-64 29	9.1	9.5	F5	2	..	18485b	61	1556	26.0	-10 55	9.3	9.3	Ao	4	..	24463b
12	480	25.7	-72 7	9.0	10.0	Ko	3	..	15167b	62	1510	26.0	-12 25	9.1	10.1	Ko	6	..	24463b
13	1398	25.8	+48 27	7.8	8.6	G5	4	..	37500i	63	1511	26.0	-12 39	9.7	9.7	Ao	2	..	24463b
14	1311	25.8	+47 18	8.0	9.4	Ma	3	..	37500i	64	1519	26.0	-13 5	6.09	5.92	B3	5	2.9	8916b
15	1158	25.8	+46 39	8.0	8.0	Ao	3	..	37438i	65	1477	26.0	-14 22	10.6	10.9	Fo	1	..	24463b
16	1157	25.8	+46 34	6.78	6.73	B8	8	..	37500i	66	1504	26.0	-16 53	8.1	8.9	G5	4	..	39861b
17	1177	25.8	+16 54	7.08	8.15	K2	4	..	37579i	67	2685	26.0	-44 34	9.0	8.9	F2	4	..	18483b
18	1223	25.8	+15 55	7.6	7.7	A2	7	..	37579i	68	2538	26.0	-45 43	7.4	7.5	Ao	9	..	18483b
19	1224	25.8	+15 29	7.6	7.7	A5	6	..	37579i	69	625	26.0	-60 40	7.2	8.2	Ko	7	..	15147b
20	1319	25.8	-0 52	8.4	8.5	A2	3	0.2	38196i	70	222	26.1	+81 54	9.5	9.8	F2	2	..	38330i
21	1469	25.8	-3 39	7.8	7.9	A3	4	..	37595i	71	892	26.1	+61 28	8.7	9.2	F8	1	..	38239i
22	1509	25.8	-12 53	9.9	10.3	F5	2	..	24463b	72	1437	26.1	+35 8	7.27	8.27	Ko	4	..	37527i
23	1475	25.8	-14 42	10.6	10.6	Ao	2	..	24463b	73	1384	26.1	+34 26	9.4	9.5	A2	2	E	38126i
24	1408	25.8	-15 42	9.9	10.2	Fo	2	..	24463b	74	1468	26.1	+19 59	8.50	9.57	K2	1	..	37441i
25	2907	25.8	-34 2	7.72	7.9	A3	5	2.2	12657b	75	1207	26.1	+11 52	6.46	6.41	B8	5	0.6 R	37579i
26	2266	25.8	-49 6	8.8	9.4	F8	4	..	18483b	76	1208	26.1	+11 10	8.5	9.7	K5	1	R	38200i
27	977	25.9	+60 33	8.6	9.0	F5	2	..	38239i	77	1271	26.1	+9 16	8.3	8.4	A2	3	..	38168i
28	1555	25.9	+43 14	8.5	9.3	G5	1	..	37397i	78	1444	26.1	-7 26	9.1	9.1	Ao	2	..	20803b
29	1323	25.9	+32 53	9.0	9.1	A2	3	..	38126i	79	1499	26.1	-9 12	9.3	9.3	Ao	4	..	24463b
30	1364	25.9	+22 15	7.17	7.17	Ao	6	E	37446i	80	1415	26.1	-20 45	9.1	9.1	Go	1	..	20535b
31	1178	25.9	+15 58	6.37	6.51	A5	8	..	37579i	81	3293	26.1	-25 49	9.3	9.0	F2	6	R	12656b
32	1326	25.9	+7 25	8.9	9.7	G5	1	..	38168i	82	2857	26.1	-37 42	10.7	9.4	A2	3	..	20527b
33	1266	25.9	+2 45	8.8	8.8	Ao	2	..	38196i	83	2553	26.1	-42 37	7.9	8.2	Ko	6	..	20555b
34	1514	25.9	-12 1	6.70	7.70	Ko	4	..	12672b	84	2386	26.1	-47 47	9.6	10.7	Ko	2	..	38414b
35	1476	25.9	-14 53	6.79	6.74	B8	7	..	12672b	85	2269	26.1	-49 13	7.9	8.2	B9	7	..	18483b
36	1410	25.9	-15 2	8.51	8.46	B8	4	..	12672b	86	983	26.2	+57 1	8.9	9.0	A5	2	..	37408i
37	1464	25.9	-19 9	6.71	8.2	Ma	7	0.7	12630b	87	1381	26.2	+19 47	7.9	8.7	G5	2	..	37441i
38	3037	25.9	-27 21	8.9	9.0	A2	3	..	12656b	88	1284	26.2	+17 44	8.3	9.3	Ko	1	..	37441i
39	2486	25.9	-40 18	7.6	8.8	Ko	3	R	12657b	89	1209	26.2	+11 36	5.08	5.14	A2	8	..	37579i
40	2487	25.9	-40 20	8.0	9.1	Ko	2	..	12657b	90	1279	26.2	+2 58	7.7	8.3	Go	5	5.3	38196i
41	2425	25.9	-41 33	8.5	8.9	K2	3	..	20555b	91	1446	26.2	-7 40	9.3	9.3	Ao	3	..	20803b
42	2550	25.9	-42 14	8.0	8.2	F5	7	..	20555b	92	1514	26.2	-12 18	10.8	10.8	Ao	2	..	24463b
43	623	25.9	-60 3	8.27	8.2	A3	6	..	15147b	93	4103	26.2	-24 5	7.7	8.7	F5	7	..	20535b
44	481	25.9	-72 57	10.4	10.5	A2	2	..	20652b	94	3069	26.2	-28 35	7.7	8.7	F5	3	..	18385b
45	324	26.0	+72 57	8.8	9.2	F5	2	..	37343i	95	3357	26.2	-31 6	7.35	7.4	Ao	3	0.8	9042b
46	385	26.0	+69 27	8.0	8.1	A5	5	..	38155i	96	2939	26.2	-36 7	8.7	8.8	Ao	5	..	20527b
47	978	26.0	+60 46	8.0	9.0	Ko	3	..	37545i	97	2445	26.2	-46 30	9.8	9.8	A2	2	..	18483b
48	1097	26.0	+52 33	6.82	6.90	A3	6	..	37408i	98	2270	26.2	-50 1	8.44	8.8	G5	4	..	18483b
49	1661	26.0	+39 51	7.22	7.28	A2	8	..	37397i	99	626	26.2	-60 13	8.3	9.0	G5	5	..	15147b
50	1436	26.0	+35 22	6.91	7.91	Ko	5	..	37527i	100	186	26.2	-81 35	9.0	9.8	G5	2	..	20557b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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6^h 26^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1093	26.3	+55 26	6.53	7.53	Ko	5	..	37408i	51	1272	26.6	+ 2 51	9.3	9.3	B9	2	..	20708b
2	1317	26.3	+45 55	9.5	9.9	F5	2	..	37500i	52	1559	26.6	-10 57	9.0	9.3	F2	4	..	24463b
3	1531	26.3	+37 38	8.6	8.7	A2	1	E	37397i	53	2450	26.6	-46 49	9.1	9.8	G5	2	..	38414b
4	1530	26.3	+37 11	8.7	9.5	G5	1	..	38941i	54	592	26.7	+64 4	8.9	9.7	G5	2	..	37545i
5	1280	26.3	+ 5 50	6.83	6.83	Ao	5	..	38168i	55	995	26.7	+59 51	8.46	8.74	Fo	3	..	38239i
6	1279	26.3	+ 5 5	8.06	8.01	B8	5	R	20708b	56	1558	26.7	+43 11	8.7	9.1	F5	2	..	37397i
7	1278	26.3	+ 5 0	8.71	8.77	A2	4	..	20708b	57	1664	26.7	+39 31	7.22	8.29	K2	4	..	37397i
8	1296	26.3	+ 4 35	8.8	8.8	Ao	3	..	38196i	58	1256	26.7	+30 23	8.0	8.1	A2	3	..	37527i
9	1515	26.3	-11 14	9.7	9.8	A2	4	..	24463b	59	1263	26.7	+29 28	8.2	9.2	Ko	2	E	37440i
10	1515	26.3	-12 27	9.3	10.1	G5	5	..	24463b	60	1141	26.7	+27 54	7.72	8.90	K5	1	..	38185i
11	1516	26.3	-12 46	8.9	9.2	F2	8	..	24463b	61	1314	26.7	+25 55	8.0	9.1	K2	1	..	38185i
12	1521	26.3	-13 36	9.1	9.1	Ao	6	..	24463b	62	1287	26.7	+17 43	8.3	8.3	Ao	3	E	37441i
13	1520	26.3	-13 48	9.3	9.4	A2	5	..	24463b	63	1296	26.7	+13 16	8.3	9.5	K5	1	..	38200i
14	1515	26.3	-17 51	7.74	8.52	G5	3	..	39861b	64	1274	26.7	+ 1 59	8.3	9.1	G5	4	..	20708b
15	2388	26.3	-47 26	8.5	9.2	Go	2	..	18483b	65	1666	26.7	- 5 18	7.22	7.20	B9	4	4,8	37595i
16	614	26.3	-69 38	5.40	6.7	G5	..	0,8R	56,122	66	1449	26.7	- 7 57	9.1	9.6	F8	1	..	20803b
17	451	26.4	+66 7	9.2	9.5	Fo	5	..	37545i	67	1503	26.7	- 9 31	10.3	10.4	A2	3	..	24463b
18	1511	26.4	+49 54	8.92	8.98	A2	2	..	37500i	68	1524	26.7	-13 26	9.1	9.7	Go	3	..	24463b
19	1631	26.4	+40 23	8.6	8.7	A2	1	..	37397i	69	1523	26.7	-13 32	7.5	7.8	Fo	4	..	12672b
20	1276	26.4	+21 30	8.6	8.6	Ao	2	..	37441i	70	1483	26.7	-14 51	10.4	10.7	Fo	1	..	24463b
21	1229	26.4	+15 11	7.7	7.7	Ao	4	E	37579i	71	1510	26.7	-16 34	9.5	10.1	Go	2	..	39861b
22	1276	26.4	+ 6 51	7.7	8.5	G5	5	..	38168i	72	1509	26.7	-16 38	9.1	9.9	G5	3	E	24463b
23	1460	26.4	+ 0 53	9.04	9.10	A2	4	0,3	12671b	73	2637	26.7	-39 41	8.4	9.4	K5	2	..	12657b
24	1551	26.4	- 4 13	9.1	9.6	F8	2	..	20803b	74	439	26.7	-71 28	10.0	10.0	Ao	4	..	15167b
25	1552	26.4	- 4 59	9.3	9.6	Fo	4	..	20803b	75	226	26.7	-78 21	8.0	8.8	G5	4	E	20557b
26	1517	26.4	-12 16	9.7	9.8	A3	3	..	24463b	76	1094	26.8	+55 34	8.0	8.1	A3	4	..	37408i
27	1481	26.4	-14 26	9.1	9.1	B9	3	..	12672b	77	1154	26.8	+28 9	7.6	7.7	A2	3	..	38185i
28	1480	26.4	-14 41	8.5	9.6	K2	6	0,2	24463b	78	1213	26.8	+11 45	6.15	7.15	Ko	5	..	37579i
29	1479	26.4	-14 58	8.86	8.94	A3	4	0,3-	39861b	79	1278	26.8	+ 6 6	6.67	6.65	B9	7	..	38168i
30	1506	26.4	-16 14	8.5	8.6	A5	4	..	39861b	80	1285	26.8	+ 5 3	8.46	8.46	Ao	3	..	20708b
31	1434	26.4	-22 15	7.21	7.5	B8	6	3,5	8904b	81	1554	26.8	- 4 10	9.1	9.7	Go	1	..	20803b
32	708	26.4	-58 5	8.7	9.7	K2	2	..	18484b	82	1504	26.8	- 9 41	9.3	9.3	Ao	4	..	24463b
33	596	26.4	-65 43	9.3	9.9	G	1	..	18485b	83	1519	26.8	-12 9	8.5	9.3	G5	7	..	24463b
34	516	26.4	-70 56	9.5	10.0	F8	3	..	15167b	84	1518	26.8	-12 19	5.33	6.33	Ko	8	2,4	12672b
35	1211	26.5	+51 10	8.0	9.0	Ko	3	..	37419i	85	1520	26.8	-12 30	6.76	6.64	B5	4	2,7	8916b
36	1286	26.5	+17 51	6.72	7.22	F8	8	R	37441i	86	1511	26.8	-16 48	9.3	9.4	A2	2	..	39861b
37	1280	26.5	+ 3 38	8.8	9.3	F8	1	..	20708b	87	3305	26.8	-25 22	9.3	9.0	F2	2	..	12656b
38	1273	26.5	+ 2 5	7.5	7.5	B9	4	..	37595i	88	3304	26.8	-25 38	9.5	9.3	K2	1	..	12656b
39	1557	26.5	-10 21	8.6	8.7	A2	3	..	12672b	89	3051	26.8	-27 42	5.81	5.7	B5	..	2,10	56,122
40	1482	26.5	-14 10	9.7	9.8	A2	4	..	24463b	90	646	26.8	-62 5	6.82	7.2	Ao	5	..	42927b
41	2914	26.5	-34 56	9.05	9.4	F5	2	..	12657b	91	377	26.8	-73 4	10.0	10.6	Go	1	..	15167b
42	2864	26.5	-37 56	8.7	7.9	Ao	6	0,2	20527b	92	378	26.8	-73 30	9.6	10.6	Ko	2	..	20652b
43	2690	26.5	-44 30	9.0	9.5	K5	1	..	18483b	93	941	26.9	+58 4	7.9	8.0	A5	4	..	37408i
44	1005	26.5	-57 16	8.5	9.4	Ko	3	..	18484b	94	1568	26.9	+42 11	9.7	9.8	A3	2	..	37397i
45	709	26.5	-58 20	8.6	10.0	K5	3	..	18484b	95	1354	26.9	+33 24	9.0	10.0	Ko	2	E	38126i
46	444	26.6	+68 0	9.7	10.7	Ko	2	..	38155i	96	1281	26.9	+21 43	8.5	8.6	A3	3	..	37441i
47	979	26.6	+59 59	8.26	8.60	F2	3	..	38239i	97	1280	26.9	+21 29	8.4	8.4	Ao	4	..	37441i
48	1230	26.6	+15 47	7.13	7.55	F5	5	..	37579i	98	1288	26.9	+17 6	7.7	7.7	Ao	2	..	38200i
49	1282	26.6	+ 5 6	7.66	7.47	B2	4	3,5	38168i	99	1379	26.9	+ 8 53	6.86	6.94	A3	7	..	38168i
50	1283	26.6	+ 5 0	6.80	6.61	B2	7	..	20708b	100	1380	26.9	+ 8 13	8.3	8.7	F5	2	..	38168i

THE HENRY DRAPER CATALOGUE.

46200

6^h 26^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1287	26.9	+ 5 13	8.9	9.5	Go	1	..	20708b	51	1356	27.2	+33 6	6.38	6.38	Ao	7	..	37527i
2	1286	26.9	+ 5 3	8.16	7.97	B2	2	..	20708b	52	1303	27.2	+24 7	9.0	9.3	F	1	..	38185i
3	1382	26.9	+ 1 34	8.9	8.9	Ao	2	..	38196i	53	1277	27.2	+ 2 10	8.9	9.9	Ko	1	..	38196i
4	1325	26.9	- 0 53	8.9	8.9	Ao	2	..	38196i	54	1674	27.2	- 5 44	9.1	10.1	Ko	2	..	20803b
5	1669	26.9	- 5 17	8.9	10.1	K5	3	..	20803b	55	1529	27.2	-13 48	10.6	10.6	Ao	2	..	24463b
6	1595	26.9	- 6 55	8.9	8.9	B9	4	..	20803b	56	1515	27.2	-16 24	9.5	10.0	F8	2	E	24463b
7	1525	26.9	-13 22	9.3	10.5	K5	2	..	24463b	57	1419	27.2	-20 40	8.7	8.8	Ao	4	..	20535b
8	2562	26.9	-42 12	7.6	8.6	K5	7	..	20555b	58	1492	27.2	-21 58	8.3	8.5	Ao	2	1,2	8902b
9	2692	26.9	-44 46	10.5	10.1	Ao	1	..	45973b	59	2505	27.2	-40 30	8.7	9.2	Ko	2	..	12657b
10	2456	26.9	-46 33	9.1	8.9	B8p	4	0,4 R	18483b	60	584	27.2	-63 7	9.5	10.1	Go	2	..	15147b
11	2455	26.9	-46 45	9.1	9.5	Go	3	..	38414b	61	390	27.2	-76 42	9.8	10.8	Ko	2	..	20652b
12	1005	26.9	-55 51	8.0	8.2	B9	8	..	18484b	62	227	27.2	-79 1	7.2	8.2	Ko	7	..	20557b
13	712	26.9	-58 17	8.4	9.4	Ko	4	..	18484b	63	1377	27.3	+22 36	9.0	9.4	F5	2	..	38185i
14	653	26.9	-59 33	7.3	8.0	F5	7	..	15147b	64	1291	27.3	+17 1	7.9	7.8	B5	5	..	37441i
15	649	26.9	-61 12	9.0	10.5	K5	2	..	15147b	65	1171	27.3	+10 14	7.9	8.9	Ko	3	5,3	38168i
16	535	27.0	+65 58	9.4	9.4	Ao	2	..	37545i	66	1453	27.3	- 7 58	9.1	9.1	Ao	3	..	20803b
17	1048	27.0	+54 8	8.0	8.5	F8	4	E	37408i	67	1465	27.3	- 8 17	9.3	10.1	G5	1	..	20803b
18	1156	27.0	+28 9	8.5	8.6	A5	2	..	38185i	68	1421	27.3	-20 32	9.3	8.9	Ao	2	..	20535b
19	1144	27.0	+27 21	9.0	9.1	A2	2	..	38185i	69	1422	27.3	-21 0	7.9	8.8	Ko	3	..	20535b
20	1317	27.0	+25 21	8.4	8.4	Ao	3	R	38185i	70	1491	27.3	-21 20	6.68	7.1	A5	7	0,8	8902b
21	1318	27.0	+25 21	9.0	9.0		3			71	3088	27.3	-26 28	9.5	9.4	Fo	2	..	12656b
22	1233	27.0	+15 5	7.24	8.02	G5	3	..	37579i	72	2921	27.3	-34 56	7.10	7.5	A5	6	2,8	9042b
23	1302	27.0	+ 4 53	7.14	6.95	B2	4	..	38168i	73	2241	27.3	-50 10	5.32	5.66	F2	7	..	9026b
24	1464	27.0	+ 0 21	8.9	9.4	F8	2	..	20708b	74	1008	27.3	-57 32	8.3	9.0	F2	5	..	18484b
25	1326	27.0	- 0 2	8.73	9.73	Ko	2	5,1	12671b	75	1099	27.4	+52 3	7.7	8.0	Fo	5	..	37419i
26	1649	27.0	- 2 43	8.7	8.7	Ao	3	..	38196i	76	1562	27.4	+43 8	7.58	7.86	Fo	5	..	37500i
27	1475	27.0	- 3 7	9.0	9.5	F8	2	..	12671b	77	1160	27.4	+28 3	7.8	8.9	K2	2	..	38185i
28	1597	27.0	- 6 22	9.1	9.9	G5	1	..	20803b	78	1399	27.4	+23 28	9.4	9.5	A2	2	..	38185i
29	1462	27.0	- 8 5	5.59	6.59	Ko	10	..	20803b	79	1398	27.4	+23 15	8.6	9.6	Ko	1	..	38185i
30	1526	27.0	-13 39	9.1	10.3	K5	3	..	24463b	80	1387	27.4	+19 55	7.70	7.65	B8	5	..	37441i
31	1514	27.0	-16 12	9.1	9.7	Go	1	..	39861b	81	1256	27.4	+18 51	8.9	9.9	K	1	..	37441i
32	1513	27.0	-16 20	8.7	8.7	Ao	4	..	39861b	82	1455	27.4	- 7 14	8.3	8.3	B9	7	..	20803b
33	1416	27.0	-20 34	8.1	7.9	F5	6	..	20535b	83	1456	27.4	- 7 20	7.18	7.24	A2	9	..	20803b
34	2697	27.0	-38 41	8.7	8.9	Ao	2	..	12657b	84	1416	27.4	-15 25	8.1	9.2	K2	3	..	39861b
35	2457	27.0	-46 1	9.2	9.8	F5	1	..	45973b	85	1516	27.4	-16 27	9.7	9.7	Ao	3	E	24463b
36	1162	27.1	+46 9	9.4	10.0	G	2	..	37500i	86	2950	27.4	-37 0	8.8	9.1	Ko	4	E	20527b
37	1458	27.1	+36 39	9.0	9.0	Ao	1	..	38941i	87	2652	27.4	-39 2	9.6	9.5	Ao	2	..	12657b
38	1386	27.1	+19 7	8.9	9.0	A2	1	..	37441i	88	2508	27.4	-40 23	6.72	7.2	B8	7	..	18558b
39	1214	27.1	+11 39	8.4	9.4	Ko	1	..	38200i	89	2460	27.4	-46 23	9.0	9.8	G5	1	..	45973b
40	1170	27.1	+10 30	8.1	9.3	K5	1	..	38200i	90	714	27.4	-58 21	8.9	9.4	F5	4	..	18484b
41	1304	27.1	+ 4 55	5.98	6.98	Ko	8	..	38196i	91	441	27.4	-71 59	8.7	9.7	Ko	5	..	15167b
42	1285	27.1	+ 3 18	8.9	9.7	G5	1	..	20708b	92	84	27.4	-85 29	9.1	10.2	K2	1	..	15145b
43	1464	27.1	- 8 22	9.3	9.9	Go	1	..	20803b	93	358	27.5	+71 14	8.0	8.0	Ao	2	E	37343i
44	1507	27.1	- 9 34	8.3	8.7	F5	7	..	20803b	94	996	27.5	+59 44	6.80	6.80	Ao	7	0,8	37408i
45	1565	27.1	-10 17	9.7	10.1	F5	1	..	24463b	95	1133	27.5	+56 5	9.5	9.6	A2	2	..	38239i
46	1528	27.1	-13 34	10.3	10.9	Go	1	..	24463b	96	1523	27.5	+38 8	6.61	7.61	Ko	5	..	37397i
47	1415	27.1	-15 35	9.5	10.3	G5	2	..	24463b	97	1357	27.5	+33 36	8.2	8.3	A2	2	..	37527i
48	3109	27.1	-32 25	9.0	8.3	A2	3	..	12657b	98	1479	27.5	+20 56	9.4	9.7	F	1	..	37441i
49	2564	27.1	-42 22	8.6	8.3	A5	2	..	12649b	99	1257	27.5	+18 52	9.3	9.3	A	1	..	37441i
50	1098	27.2	+52 57	7.30	7.36	A2	8	..	37419i	100	1337	27.5	+ 7 24	4.50	4.50	Aop	..	2, R	56,82

ANNALS OF HARVARD COLLEGE OBSERVATORY.

46300

6^h 27^m 5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1290	27.5	+ 3 53	7.6	8.0	F5	5	..	38196i	51	2948	27.7	-35 33	8.5	8.2	A2	4	..	12657b
2	1386	27.5	+ 1 52	8.4	8.9	F8	2	..	38196i	52	2707	27.7	-38 12	9.4	8.8	Ao	2	..	18558b
3	1477	27.5	- 3 29	9.1	9.2	A2	3	..	12671b	53	2442	27.7	-41 16	7.8	8.9	K5	3	..	12657b
4	1678	27.5	- 5 48	5.64	5.78	A5	7	..	37595i	54	1096	27.7	-53 40	10.1	10.2	A2	1	..	20547b
5	1525	27.5	-12 23	10.4	10.4	Ao	3	..	24463b	55	1095	27.7	-56 47	5.16	7.2	Ko	..	..	56,122
6	1532	27.5	-13 39	9.7	10.1	F5	3	..	24463b	56	601	27.7	-67 19	8.9	10.1	K5	2	..	18485b
7	1485	27.5	-14 16	9.3	9.4	A2	2	..	39861b	57	1322	27.8	+45 24	9.5	9.5	A	1	..	37500i
8	1521	27.5	-17 59	6.76	7.76	Ko	4	..	39861b	58	1638	27.8	+40 8	8.87	8.87	Ao	2	..	37397i
9	4128	27.5	-24 58	9.70	9.6	A5	1	..	20535b	59	1528	27.8	+38 36	7.12	7.54	F5	5	..	37397i
10	2946	27.5	-35 25	8.4	8.5	F5	2	..	12657b	60	1284	27.8	+21 8	8.7	8.8	A5	4	..	3744ri
11	2292	27.5	-49 55	8.24	8.8	Fo	5	..	18483b	61	1599	27.8	- 6 28	9.5	10.1	Go	2	..	20803b
12	1007	27.5	-55 27	8.7	9.0	F5	4	..	18484b	62	1530	27.8	-12 49	9.9	10.0	A2	4	..	24463b
13	657	27.5	-60 0	9.5	9.9	F5	2	..	15147b	63	1534	27.8	-13 59	9.7	10.5	G5	4	..	24463b
14	544	27.5	-66 37	9.8	9.9	A3	2	..	18485b	64	2709	27.8	-38 58	8.0	9.5	K5	1	..	12657b
15	980	27.6	+60 43	9.2	9.3	A2	2	..	38239i	65	2512	27.8	-40 51	6.12	7.7	K2	7	..	12657b
16	942	27.6	+58 52	8.0	9.0	Ko	3	..	38239i	66	654	27.8	-61 2	8.6	9.1	F5	3	..	15147b
17	943	27.6	+58 11	6.67	7.09	F5	8	E	37408i	67	650	27.8	-62 29	8.5	9.6	K2	3	..	15147b
18	1134	27.6	+56 27	6.53	6.87	F2	9	..	37419i	68	526	27.8	-68 12	8.5	8.9	F5	4	..	18485b
19	1050	27.6	+54 40	8.4	8.4	Ao	4	..	37419i	69	619	27.8	-69 13	9.0	10.0	Ko	2	..	18485b
20	1402	27.6	+48 2	7.8	8.1	Fo	5	5,5 R	37438i	70	1574	27.9	+42 18	9.7	10.2	F8	1	..	37397i
21	1571	27.6	+42 34	var.	var.	Na	..	R	56,214	71	1672	27.9	+39 6	9.4	10.4	Ko	1	..	3894ri
22	1163	27.6	+28 56	8.7	8.7	Ao	1	..	38185i	72	1383	27.9	+22 25	8.8	9.2	F5	2	5,1	3744ri
23	1216	27.6	+11 36	9.3	9.3	Ao	2	..	38200i	73	1338	27.9	+14 40	7.9	9.0	K2	3	..	38200i
24	1290	27.6	+ 5 28	8.7	9.8	K2	1	..	38168i	74	1339	27.9	+14 14	5.61	6.61	Ko	7	..	38200i
25	1469	27.6	+ 0 30	8.5	9.0	F8	4	..	38196i	75	1295	27.9	+ 5 33	8.5	9.3	G5	3	..	38168i
26	1479	27.6	- 3 43	8.7	8.7	A	1	..	38196i	76	1311	27.9	+ 4 21	10.3	10.4	A2	2	..	20708b
27	1486	27.6	-14 5	9.1	10.5	Ma	2	..	24463b	77	1391	27.9	+ 1 20	7.4	8.6	K5	3	..	38196i
28	3991	27.6	-23 21	4.35	4.13	Bi	..	1, R	28,198	78	1269	27.9	- 1 18	8.7	9.0	F2	2	..	38196i
29	3119	27.6	-32 12	9.1	8.9	Ao	3	..	18385b	79	1681	27.9	- 5 48	9.9	9.9	Ao	1	..	20803b
30	3120	27.6	-32 49	10.4	8.9	Ao	2	..	18385b	80	1462	27.9	- 7 26	8.4	8.2	B2	5	..	20803b
31	2402	27.6	-47 15	9.6	9.5	Go	1	..	45973b	81	1532	27.9	-12 31	10.8	10.8	Ao	2	..	24463b
32	658	27.6	-59 42	8.08	9.3	Ko	5	..	15147b	82	1489	27.9	-14 47	8.9	9.9	Ko	1	..	39861b
33	601	27.6	-65 38	9.6	9.6	Ao	2	..	18485b	83	2340	27.9	-48 11	7.9	9.2	K5	2	3,2	18483b
34	260	27.7	+75 19	8.87	9.37	F8	1	..	37343i	84	228	27.9	-78 40	9.5	10.3	G5	1	..	20557b
35	1096	27.7	+55 44	8.0	8.5	F8	4	E	37408i	85	1214	28.0	+51 23	9.5	9.5	A	1	..	37419i
36	1148	27.7	+27 7	8.0	9.0	Ko	2	..	38185i	86	1384	28.0	+22 11	8.0	8.1	A3	5	..	3744ri
37	1303	27.7	+13 45	8.9	8.9	Ao	2	..	38200i	87	1340	28.0	+ 7 14	8.9	8.9	Ao	2	..	20708b
38	1295	27.7	+ 3 49	9.6	9.6	B9	1	..	20708b	88	1314	28.0	+ 4 43	9.05	9.05	Ao	2	..	20708b
39	1558	27.7	- 4 22	8.9	8.7	B3	5	..	20803b	89	1480	28.0	- 3 45	8.0	9.0	Ko	2	..	38196i
40	1680	27.7	- 5 16	7.40	7.35	B8	3	2,9	37595i	90	1682	28.0	- 5 34	10.2	10.2	A	1	R	20803b
41	1598	27.7	- 6 25	8.7	9.3	Go	5	..	20803b	91	1467	28.0	- 8 48	var.	var.	K5	2	R	20803b
42	1510	27.7	-10 0	8.96	9.38	F5	5	..	24463b	92	1536	28.0	-13 14	9.0	10.0	Ko	3	..	24463b
43	1487	27.7	-14 27	8.9	9.9	Ko	1	..	39861b	93	1526	28.0	-18 1	9.1	9.1	Ao	1	..	39861b
44	1518	27.7	-16 3	9.7	10.7	Ko	2	E	24463b	94	1476	28.0	-19 59	8.33	8.2	B9	6	..	20535b
45	1517	27.7	-16 31	10.6	10.6	Ao	2	E	24463b	95	651	28.0	-62 30	10.1	10.2	A3	2	..	15147b
46	1425	27.7	-20 13	9.1	9.1	A2	3	..	20535b	96	548	28.0	-66 41	8.7	10.1	Ma	2	..	18485b
47	3121	27.7	-32 48	6.59	8.0	Ma	5	..	12657b	97	1516	28.1	+49 57	8.07	8.05	B9	5	..	37500i
48	2925	27.7	-34 34	8.7	8.8	A3	3	..	12657b	98	1323	28.1	+45 19	9.7	9.7	Ao	3	..	5400m
49	2947	27.7	-35 11	5.76	7.4	Go	..	0,6 R	56,122	99	1338	28.1	+31 2	8.5	8.5	Ao	3	..	37527i
50	2947	27.7	-35 11	5.76	7.4	A3	..	0,6 R	56,122	100	1309	28.1	+24 7	9.8	9.8	Ao	2	..	38185i

THE HENRY DRAPER CATALOGUE.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1386	28.1	+22 12	8.0	8.1	A3	6	..	37441i	51	1539	28.4	+37 9	7.42	8.20	G5	4	E	37527i
2	1179	28.1	+10 6	9.6	9.6	A	1	..	38200i	52	1287	28.4	+21 31	8.4	8.7	Fo	4	..	37441i
3	1333	28.1	- 0 46	8.9	9.0	A2	3	..	38196i	53	1223	28.4	+11 28	8.5	9.5	Ko	1	..	38200i
4	1271	28.1	- 1 38	8.3	8.6	F2	3	..	38196i	54	1343	28.4	+ 7 19	8.3	9.3	Ko	2	..	38168i
5	1463	28.1	- 7 43	8.9	9.3	F5	3	..	20803b	55	1473	28.4	+ 0 20	9.6	9.7	A2	1	..	38196i
6	1468	28.1	- 8 5	8.5	8.8	Fo	6	..	20803b	56	1683	28.4	- 5 33	10.2	10.2	B9	3	..	20803b
7	1520	28.1	-11 6	6.38	7.38	Kop	7	R	12672b	57	1684	28.4	- 5 48	9.7	9.7	B9	3	..	20803b
8	1521	28.1	-11 28	9.3	10.3	Ko	2	..	24463b	58	1473	28.4	- 8 51	9.9	9.9	Ao	2	..	20803b
9	1537	28.1	-13 21	9.5	10.5	Ko	3	..	24463b	59	1528	28.4	-17 38	7.7	7.7	B9	6	3,3	39861b
10	1422	28.1	-15 36	9.9	10.9	Ko	1	..	24463b	60	1480	28.4	-19 57	8.03	8.8	K2	3	..	20535b
11	1495	28.1	-21 16	9.3	9.4	Ko	2	..	20535b	61	4008	28.4	-23 33	9.0	8.6	Ao	3	..	20535b
12	3068	28.1	-27 57	7.8	9.0	K5	2	..	12656b	62	2882	28.4	-37 6	7.9	7.6	B9	7	0,4-	12657b
13	3189	28.1	-29 14	7.52	8.6	K2	4	..	18385b	63	593	28.5	+64 49	7.45	7.87	F5	8	..	37545i
14	2932	28.1	-34 26	9.0	8.5	Ao	3	..	12657b	64	1342	28.5	+31 31	7.11	8.11	Ko	3	..	37527i
15	2518	28.1	-43 39	6.68	7.5	Ko	7	..	18483b	65	1153	28.5	+27 7	9.1	9.1	Ao	1	..	38185i
16	1009	28.1	-57 12	8.9	9.0	A2	4	..	18484b	66	1407	28.5	+23 17	9.4	9.4	Ao	3	..	38185i
17	660	28.1	-59 42	8.42	8.2	A5	7	..	15147b	67	1288	28.5	+21 30	8.7	9.8	K2	1	..	37441i
18	379	28.1	-75 17	9.9	10.7	G5	2	..	20652b	68	1298	28.5	+17 18	9.1	9.1	A	1	..	37441i
19	293	28.2	+74 8	7.8	8.1	F2	4	..	37343i	69	1300	28.5	+ 5 34	8.5	8.5	B8	3	..	38168i
20	440	28.2	+67 8	8.7	8.8	A2	3	..	38155i	70	1289	28.5	+ 2 13	9.6	10.1	F8	1	..	20708b
21	1324	28.2	+45 42	var.	var.	Mb	4	5,2 R	5400m	71	1476	28.5	+ 0 42	8.5	8.6	A5	2	..	38196i
22	1342	28.2	+14 43	8.5	8.5	Ao	2	..	38200i	72	1474	28.5	+ 0 2	8.69	9.76	K2	1	..	12671b
23	1343	28.2	+14 22	8.2	8.6	F5	3	..	38200i	73	1516	28.5	- 9 35	9.3	10.3	Ko	2	..	24463b
24	1298	28.2	+ 5 43	8.4	9.2	G5	2	..	38168i	74	1536	28.5	-12 50	8.5	8.9	F5	7	..	24463b
25	1656	28.2	- 2 23	9.1	10.1	Ko	2	0,2	38196i	75	1535	28.5	-13 1	9.3	9.3	Ao	4	..	24463b
26	1469	28.2	- 8 54	7.20	7.20	Ao	10	..	20803b	76	2883	28.5	-38 0	8.0	8.2	Fo	3	..	18558b
27	1513	28.2	-10 1	9.11	10.11	Ko	4	..	24463b	77	2713	28.5	-44 48	9.4	8.9	F5	2	..	18483b
28	1524	28.2	-12 0	8.5	8.4	B5	5	..	12672b	78	2294	28.5	-49 2	9.8	11.2	Ma	1	..	38414b
29	1533	28.2	-12 15	10.4	11.4	Ko	2	..	24463b	79	662	28.5	-59 31	6.74	6.9	Fo	5	0,9	42927b
30	1423	28.2	-15 46	7.9	8.0	A2	6	..	39861b	80	893	28.6	+61 34	6.05	6.61	Go	9	..	37545i
31	2962	28.2	-36 52	6.31	7.4	Ma	7	0,8	12657b	81	1165	28.6	+46 4	10.2	11.2	Ko	1	..	5400m
32	2571	28.2	-42 30	9.1	9.0	F8	2	..	20556b	82	1540	28.6	+37 48	6.93	7.71	G5	5	..	38941i
33	2571	28.2	-45 46	8.6	8.9	Go	4	..	18483b	83	1193	28.6	+16 44	8.7	8.7	Ao	3	..	37441i
34	2411	28.2	-47 11	8.4	9.2	K5	2	..	18483b	84	1319	28.6	+ 4 44	7.65	7.60	B8	4	..	38168i
35	937	28.2	-52 48	8.4	9.1	G5	4	..	20547b	85	1318	28.6	+ 4 36	8.3	8.1	B2	4	..	20708b
36	638	28.2	-60 36	8.6	9.3	F8	4	..	15147b	86	1336	28.6	- 0 12	8.01	8.01	Ao	4	..	38196i
37	639	28.2	-60 56	7.9	8.2	F8	6	..	15147b	87	1274	28.6	- 1 9	5.02	4.85	B3	..	2,8	56,82
38	379	28.2	-73 48	9.5	10.6	K2	4	..	20652b	88	1685	28.6	- 5 12	9.9	9.9	B9	2	..	20803b
39	652	28.3	+63 55	8.7	9.1	F5	4	..	37545i	89	3195	28.6	-29 35	8.3	9.6	K2	2	E	24433b
40	1517	28.3	+49 43	8.9	9.3	F5	1	..	37419i	90	658	28.6	-61 10	8.9	10.7	Mb	..	..	M
41	1403	28.3	+48 28	9.0	10.1	K2	1	..	37438i	91	571	28.6	-64 10	8.9	8.9	Ao	3	..	18485b
42	1361	28.3	+33 25	9.0	9.8	G5	1	..	37527i	92	229	28.6	-78 59	10.9	11.2	Fo	4	..	20652b
43	1180	28.3	+10 15	8.8	8.8	A	1	..	38200i	93	1565	28.7	+43 47	7.10	7.88	G5	5	5,7-	37500i
44	1471	28.3	- 8 51	9.0	9.3	Fo	4	..	20803b	94	1566	28.7	+43 20	8.8	9.6	G5	5	0,1	5400m
45	1572	28.3	-10 57	8.9	9.5	Go	4	..	24463b	95	1344	28.7	+14 50	7.44	7.86	F5	4	..	38200i
46	1432	28.3	-20 57	7.13	7.2	B5	5	0,7	8902b	96	1290	28.7	+ 2 18	8.9	9.3	F5	1	..	20708b
47	2713	28.3	-38 34	8.4	9.5	Ko	1	..	12657b	97	1603	28.7	- 6 42	9.3	9.4	A5	1	..	20803b
48	656	28.3	-61 14	8.9	10.4	K5	2	..	15147b	98	1474	28.7	- 8 26	9.9	10.0	A2	3	..	20803b
49	1038	28.4	+53 27	9.7	9.8	A3	1	..	37419i	99	1542	28.7	-14 2	8.9	9.4	F8	6	..	24463b
50	1325	28.4	+45 39	10.2	10.5	Fo	2	..	5400m	100	1490	28.7	-14 44	8.1	8.1	B9	6	..	12672b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1426	28.7	-15 12	10.4	10.4	Ao	2	..	24463b	51	1326	29.0	+45 19	10.2	11.2	Ko	1	..	5400m
2	4153	28.7	-24 18	8.9	9.1	Ko	3	..	20535b	52	1338	29.0	+32 39	7.8	7.8	B8	6	..	37527i
3	2885	28.7	-37 24	8.8	9.1	K2	1	..	12657b	53	1168	29.0	+28 6	5.05	5.05	Ao	..	..	56,83
4	2481	28.7	-46 23	8.9	9.2	Fo	5	..	18483b	54	1198	29.0	+16 27	7.9	8.0	A2	3	..	37441i
5	2295	28.7	-49 33	7.5	8.2	Ko	7	..	18483b	55	1284	29.0	+ 9 10	7.7	8.9	K5	1	..	38168i
6	664	28.7	-59 50	9.5	10.5	Ko	1	..	15147b	56	1354	29.0	+ 7 23	8.3	9.1	G5	1	..	38168i
7	607	28.7	-65 34	8.3	9.5	K5	3	..	18485b	57	1288	29.0	+ 6 46	7.7	7.8	A2	5	..	38168i
8	388	28.7	-74 11	9.1	10.2	K2	5	..	20652b	58	1303	29.0	+ 2 59	6.77	7.05	Fo	7	..	38196i
9	359	28.8	+71 50	6.07	6.85	G5	6	..	37343i	59	1292	29.0	+ 2 28	8.5	8.4	B5	4	..	20708b
10	864	28.8	+62 31	9.0	9.0	Ao	3	..	37545i	60	1479	29.0	+ 0 56	9.3	9.8	F8	2	0,1	12671b
11	1216	28.8	+51 30	8.6	8.7	A2	2	..	37419i	61	1338	29.0	- 0 3	9.3	9.9	Go	2	..	12671b
12	1577	28.8	+42 41	8.0	8.0	Ao	4	..	37500i	62	1566	29.0	- 4 30	8.5	9.7	K5	2	..	20803b
13	1578	28.8	+42 0	8.6	8.7	A2	2	..	37397i	63	1606	29.0	- 6 2	9.1	9.1	Ao	3	..	20803b
14	1398	28.8	+33 59	9.0	9.6	Go	1	..	38941i	64	1529	29.0	-11 47	8.9	9.0	A2	8	..	24463b
15	1315	28.8	+24 22	9.5	9.5	Ao	2	..	38185i	65	1533	29.0	-18 1	8.7	9.5	G5	1	..	39861b
16	1391	28.8	+19 30	6.88	6.88	Ao	8	..	37441i	66	1446	29.0	-22 32	8.18	8.6	K2	4	..	20535b
17	1302	28.8	+ 5 12	8.1	8.2	A5	4	..	38168i	67	3114	29.0	-26 7	9.7	9.3	Fo	4	..	12656b
18	1469	28.8	- 7 39	9.3	9.8	F8	2	..	20803b	68	2889	29.0	-37 37	5.31	6.7	G5	9	5,8	9042b
19	1475	28.8	- 8 6	9.1	9.0	B5	6	..	20803b	69	1946	29.0	-51 45	5.60	6.3	F8	..	..	28,198
20	1574	28.8	-10 18	9.1	9.1	Ao	5	..	24463b	70	985	29.1	+60 10	8.5	9.3	G5	2	..	37545i
21	1575	28.8	-10 42	9.5	9.8	Fo	2	..	24463b	71	1101	29.1	+52 37	8.9	9.7	G5	1	..	37419i
22	1543	28.8	-13 23	10.2	10.2	Ao	2	..	24463b	72	1244	29.1	+15 9	8.4	9.2	G5	1	..	38200i
23	3078	28.8	-27 20	7.05	8.1	F5	5	..	8904b	73	1295	29.1	+ 2 36	8.1	7.9	B2	5	..	20708b
24	3197	28.8	-29 31	8.5	9.2	Ko	2	..	24433b	74	1294	29.1	+ 2 12	8.5	9.5	Ko	1	0,1	20708b
25	2939	28.8	-34 8	8.7	8.9	G5	1	..	12657b	75	1568	29.1	- 4 8	8.5	8.6	A2	2	..	38196i
26	2297	28.8	-49 41	8.5	9.1	G5	3	..	18483b	76	1567	29.1	- 5 0	8.50	8.50	Ao	4	..	12671b
27	595	28.9	+64 52	9.5	9.5	A	2	..	37545i	77	1607	29.1	- 6 51	9.7	9.7	Ao	2	..	20803b
28	1490	28.9	+44 48	8.82	9.24	F5	2	..	5400m	78	1519	29.1	- 9 17	8.7	9.7	Ko	4	..	24463b
29	1567	28.9	+43 29	8.8	8.9	A3	3	..	5400m	79	1531	29.1	-11 40	9.3	9.6	Fo	3	..	24463b
30	1568	28.9	+43 23	8.8	9.6	G5	2	..	5400m	80	1530	29.1	-12 1	9.9	9.9	B9	3	..	24463b
31	1170	28.9	+28 31	8.5	8.6	A2	2	..	38185i	81	1545	29.1	-13 16	9.1	10.1	Ko	3	..	24463b
32	1326	28.9	+25 0	7.96	9.03	K2	3	..	38185i	82	1447	29.1	-23 0	7.9	8.8	K5	4	..	20535b
33	1267	28.9	+18 26	8.4	8.4	Ao	2	..	37441i	83	4019	29.1	-23 41	8.5	8.2	B9	2	..	8904b
34	1199	28.9	+12 57	8.8	8.8	Ao	1	..	38200i	84	4160	29.1	-24 23	9.5	9.3	Go	1	..	20535b
35	1198	28.9	+12 55	8.1	8.2	A2	4	..	38200i	85	3084	29.1	-27 31	8.0	8.7	A2	2	..	8904b
36	1282	28.9	+ 9 9	8.5	8.5	Ao	2	..	38168i	86	2423	29.1	-47 51	8.4	7.3	A3	7	..	18483b
37	1352	28.9	+ 7 18	8.3	8.8	F8	2	..	38168i	87	663	29.1	-61 11	8.2	8.4	Fo	6	..	15147b
38	1395	28.9	+ 1 43	8.5	8.6	A2	3	..	38196i	88	212	29.2	+79 40	5.60	6.10	F8	..	3,10	2621c
39	1276	28.9	- 1 56	8.32	9.39	K2	2	..	38196i	89	263	29.2	+75 49	8.37	8.43	A2	3	..	37343i
40	1605	28.9	- 6 30	8.6	8.7	A3	8	..	20803b	90	1136	29.2	+56 56	5.75	5.75	Ao	10	E	37408i
41	1471	28.9	- 7 8	7.9	7.9	B9	10	..	20803b	91	1039	29.2	+53 33	8.0	8.6	Go	3	..	37419i
42	1470	28.9	- 8 1	9.7	9.7	Ao	4	..	20803b	92	1270	29.2	+30 29	8.8	8.8	A	2	R	37527i
43	1540	28.9	-12 2	9.0	9.6	Go	8	..	24463b	93	1202	29.2	+16 51	7.5	7.5	B9	7	..	37441i
44	1539	28.9	-12 37	9.9	10.0	A2	3	..	24463b	94	1201	29.2	+16 16	6.67	7.45	G5	5	..	37441i
45	1427	28.9	-15 28	8.9	9.9	Ko	1	..	39861b	95	1246	29.2	+15 25	var.	var.	G5	4	R	38200i
46	3082	28.9	-27 52	8.88	9.9	Ko	2	E	24433b	96	1356	29.2	+ 7 46	8.4	8.7	Fo	3	..	38168i
47	3407	28.9	-31 57	5.70	5.53	B3	..	0,5-	28,198	97	1304	29.2	+ 3 23	7.4	8.4	Ko	5	..	38196i
48	2940	28.9	-34 16	10.0	9.5	F5	1	..	12657b	98	1687	29.2	- 5 57	9.1	9.2	A2	3	..	20803b
49	662	28.9	-61 55	10.0	10.5	F8	1	..	15147b	99	1520	29.2	- 9 22	9.7	9.7	Ao	3	..	24463b
50	217	29.0	+80 20	7.50	8.50	Ko	3	..	37343i	100	1546	29.2	-13 35	9.0	9.6	Go	4	..	24463b

THE HENRY DRAPER CATALOGUE.

46600

6^h 29^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1438	29.2	-20 4	7.43	7.9	F2	8	0,3	20535b	51	3208	29.4	-29 41	7.8	9.2	K5	4	0,2	24433b
2	1437	29.2	-20 51	6.52	7.9	G5	5	0,4	8904b	52	2580	29.4	-45 14	7.20	8.3	K0	8	..	18483b
3	3271	29.2	-30 47	8.1	8.9	A0	4	..	18385b	53	586	29.4	-63 7	9.1	9.2	A5	5	..	15147b
4	653	29.2	-62 43	9.4	9.5	A2	3	..	15147b	54	524	29.4	-70 11	9.9	10.7	G5	1	..	15168b
5	530	29.2	-68 4	9.4	10.0	G0	2	..	18485b	55	1493	29.5	+44 19	9.4	10.2	G5	2	..	5400m
6	596	29.3	+64 14	8.0	9.1	K2	4	..	37545i	56	1344	29.5	+32 43	8.5	8.6	A2	3	..	37527i
7	998	29.3	+59 30	7.51	8.29	G5	3	..	37545i	57	1351	29.5	+31 33	7.22	8.29	K2	2	..	37527i
8	1097	29.3	+55 26	7.36	7.42	A2	7	..	37419i	58	1292	29.5	+21 30	8.6	8.6	B8	5	..	37441i
9	1166	29.3	+46 51	9.4	10.2	G5	2	..	5400m	59	1205	29.5	+12 45	7.6	7.7	A3	7	..	38200i
10	1173	29.3	+28 20	8.0	8.0	B9	4	..	38185i	60	1232	29.5	+11 12	7.9	8.0	A3	4	..	38200i
11	1204	29.3	+12 37	8.3	8.7	F5	3	..	38200i	61	1307	29.5	+3 9	8.5	8.9	F5	2	..	38196i
12	1306	29.3	+5 3	7.11	8.46	Mb	4	..	38196i	62	1584	29.5	-10 48	9.3	9.6	F2	6	..	24463b
13	1399	29.3	+1 32	9.6	9.7	A2	2	2,1	12671b	63	1583	29.5	-10 54	9.3	10.1	G5	2	..	24463b
14	1662	29.3	-2 50	8.0	8.1	A3	5	0,7-	12671b	64	1548	29.5	-13 17	9.5	10.3	G5	2	..	24463b
15	1487	29.3	-3 21	8.5	9.5	K0	2	..	12671b	65	1450	29.5	-22 38	9.3	9.1	A0	2	..	20535b
16	1569	29.3	-4 49	7.05	7.00	B8	5	..	37595i	66	2580	29.5	-42 11	8.5	8.6	K0	3	..	12649b
17	1611	29.3	-6 34	9.0	9.8	G5	2	..	20803b	67	447	29.5	-71 46	9.1	10.3	K5	1	..	15167b
18	1521	29.3	-9 58	9.66	10.22	G0	2	..	24463b	68	382	29.5	-73 9	9.7	9.7	A0	5	..	20652b
19	1580	29.3	-10 39	8.9	9.3	F5	8	..	24463b	69	383	29.5	-73 23	9.8	10.2	F5	3	..	20652b
20	1542	29.3	-12 34	9.3	9.3	B9	6	..	24463b	70	391	29.5	-76 21	10.0	10.8	G5	2	..	20652b
21	1493	29.3	-14 6	9.0	9.0	A0	3	..	39861b	71	146	29.5	-82 9	8.9	9.0	A3	5	..	20557b
22	1429	29.3	-15 11	9.9	10.9	K0	1	..	24463b	72	597	29.6	+64 41	8.9	8.9	A0	3	..	37545i
23	1439	29.3	-20 56	8.7	8.8	A0	5	..	20535b	73	1327	29.6	+45 13	10.2	10.3	A2	3	..	5400m
24	4167	29.3	-24 8	8.1	8.4	A0	3	..	8904b	74	1494	29.6	+44 48	8.7	8.7	A0	4	..	5400m
25	2579	29.3	-42 29	8.6	8.4	A2	3	..	18558b	75	1207	29.6	+12 41	9.9	9.9	A	1	..	38200i
26	2579	29.3	-45 27	9.6	9.8	F5	2	..	45973b	76	1343	29.6	-0 56	8.9	9.3	F5	3	..	12671b
27	1950	29.3	-51 51	7.8	9.2	K2	3	..	20547b	77	1283	29.6	-1 7	9.6	9.7	A2	3	..	12671b
28	1102	29.3	-56 52	8.9	9.0	A0	5	..	18484b	78	1431	29.6	-15 30	9.1	9.9	G5	1	..	39861b
29	665	29.3	-61 43	8.6	8.7	F0	4	..	15147b	79	3128	29.6	-26 15	7.4	7.7	A0	7	..	8904b
30	446	29.3	-71 57	8.5	8.5	A0	2	1,9	9062b	80	3211	29.6	-29 8	7.8	8.0	A0	7	..	18385b
31	218	29.3	-79 34	10.2	10.6	F5	5	..	20652b	81	2528	29.6	-40 57	9.3	9.8	K5	1	..	12657b
32	225	29.4	+81 14	8.5	9.7	K5	2	..	38330i	82	2730	29.6	-44 8	7.3	7.3	A3	8	..	18483b
33	455	29.4	+66 15	7.64	7.59	B8	8	..	37545i	83	2354	29.6	-48 35	9.8	10.0	G0	2	..	38414b
34	866	29.4	+62 43	9.9	9.9	A	2	..	37545i	84	1100	29.6	-53 11	8.3	9.0	G5	4	..	20547b
35	896	29.4	+61 34	7.02	7.10	A3	8	..	37545i	85	667	29.6	-61 52	9.3	9.9	G0	2	..	15147b
36	895	29.4	+61 6	8.8	8.8	A0	2	..	37545i	86	655	29.6	-62 22	10.2	10.2	A0	2	..	15147b
37	1404	29.4	+48 11	8.4	8.5	A2	3	..	37500i	87	1539	29.7	+38 31	var.	var.	Na	5	R	37397i
38	1491	29.4	+44 26	9.5	10.9	Ma	1	..	5400m	88	1496	29.7	+20 58	8.0	8.3	F2	5	..	37441i
39	1537	29.4	+38 4	8.1	8.9	G5	3	..	37397i	89	1346	29.7	-0 17	10.3	10.6	F2	2	..	12671b
40	1402	29.4	+34 16	8.0	8.8	G5	2	..	38941i	90	1492	29.7	-3 48	9.3	9.4	A2	1	..	12671b
41	1343	29.4	+32 22	7.23	7.29	A2	6	..	37527i	91	1474	29.7	-7 53	8.5	9.7	K5	4	..	20803b
42	1357	29.4	+7 39	6.42	6.42	A0	..	0,7	56,83	92	1451	29.7	-22 12	9.1	8.9	A2	3	..	20535b
43	1400	29.4	+1 48	8.1	8.1	B9	6	..	38196i	93	3217	29.7	-29 32	8.3	9.5	Mb	2	..	24433b
44	1663	29.4	-3 0	7.09	8.16	K2	4	3,5-	12671b	94	3153	29.7	-32 9	7.13	8.6	K5	7	..	18385b
45	1489	29.4	-3 31	9.1	10.1	K0	2	..	12671b	95	2490	29.7	-46 54	9.2	10.1	F8	1	..	45973b
46	1689	29.4	-5 15	8.3	8.3	B8	8	..	12671b	96	1012	29.7	-57 32	8.0	9.0	K0	7	..	18484b
47	1533	29.4	-11 24	8.3	8.7	F5	2	..	12672b	97	718	29.7	-58 56	7.4	8.5	K2	7	..	18484b
48	1494	29.4	-14 43	8.9	8.9	B9	2	..	12672b	98	645	29.7	-61 1	10.0	10.0	A0	2	..	15147b
49	1524	29.4	-16 33	9.7	9.7	A0	2	..	39861b	99	668	29.7	-61 32	9.1	9.7	G5	3	..	15147b
50	1498	29.4	-21 46	9.7	9.2	A0	1	..	20535b	100	487	29.7	-72 55	10.2	10.2	A0	2	..	15167b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

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6^h 29^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	441	29.8	+67 24	7.9	7.9	B9	8	..	37545i	51	1433	30.0	-15 57	8.7	9.1	F5	5	..	39861b
2	988	29.8	+57 16	6.84	7.62	G5	4	E	37408i	52	3366	30.0	-25 57	8.1	8.7	A5	3	..	8904b
3	1040	29.8	+53 36	8.9	9.3	F5	2	..	37419i	53	3285	30.0	-30 30	7.9	9.8	Ma	1	..	18385b
4	1472	29.8	+41 11	7.8	7.9	A2	5	..	37397i	54	2357	30.0	-48 4	7.4	8.8	K2	4	..	18483b
5	1540	29.8	+38 52	8.1	8.1	B9	2	..	37397i	55	1957	30.0	-51 6	8.8	9.2	A5	3	..	20547b
6	1394	29.8	+19 5	7.5	8.5	Ko	2	..	37441i	56	941	30.0	-52 26	9.1	10.0	Ko	2	..	20547b
7	1321	29.8	+13 18	7.7	7.7	Ao	4	..	38200i	57	392	30.0	-76 56	9.5	10.5	Ko	4	..	20652b
8	1237	29.8	+11 33	8.4	9.6	K5	1	..	38200i	58	249	30.1	+76 41	7.24	8.02	G5	6	..	37343i
9	1186	29.8	+10 4	6.06	7.24	K5	6	..	38168i	59	536	30.1	+65 8	10.2	10.8	G	2	..	37545i
10	1406	29.8	+ 8 5	8.4	8.4	Ao	3	..	38168i	60	1546	30.1	+37 21	8.0	9.0	Ko	1	..	38408i
11	1299	29.8	+ 2 51	8.9	8.7	B	1	R	20708b	61	1547	30.1	+37 0	8.0	8.0	Ao	2	..	38941i
12	1402	29.8	+ 1 54	8.1	8.1	Ao	6	..	38196i	62	1368	30.1	+33 28	7.9	8.7	G5	4	..	37527i
13	1489	29.8	+ 0 35	8.3	8.3	Ao	3	..	38196i	63	1354	30.1	+31 26	7.8	7.9	A2	4	..	37527i
14	1486	29.8	+ 0 6	9.3	10.3	Ko	1	..	12671b	64	1307	30.1	+17 17	7.7	7.7	Ao	6	..	37441i
15	1616	29.8	- 6 4	8.5	8.8	Fo	8	..	20803b	65	1209	30.1	+16 31	7.4	8.4	Ko	3	..	37441i
16	1536	29.8	-11 9	7.35	7.63	Fo	5	..	12672b	66	1238	30.1	+11 48	8.5	9.5	Ko	1	..	38200i
17	1544	29.8	-12 24	9.1	9.1	Ao	3	..	12672b	67	1300	30.1	+ 2 41	9.6	9.7	A3	1	..	20708b
18	1495	29.8	-14 31	10.3	10.3	Ao	3	..	24463b	68	1406	30.1	+ 1 22	9.3	9.3	Ao	4	0,2	12671b
19	1432	29.8	-15 56	7.5	7.9	F5	6	..	39861b	69	1491	30.1	+ 0 58	5.69	5.57	B5	8	3,10	37595i
20	1526	29.8	-16 13	9.1	10.1	Ko	3	E	24463b	70	1528	30.1	-16 6	9.4	9.8	F5	2	E	24463b
21	1502	29.8	-21 28	7.8	7.7	Ao	3	2,2	8904b	71	1540	30.1	-17 18	8.9	8.9	B9	4	..	39861b
22	3095	29.8	-27 53	9.7	9.3	A	1	..	12656b	72	3135	30.1	-26 46	9.0	9.6	Ko	2	..	24433b
23	3133	29.8	-28 49	8.3	9.4	F8	3	..	24433b	73	3159	30.1	-32 57	8.2	7.4	Ao	6	..	12657b
24	3218	29.8	-29 11	8.5	9.5	K5	2	..	24433b	74	2460	30.1	-41 3	8.7	9.5	K2	2	..	12657b
25	3154	29.8	-32 26	9.4	8.9	Ao	2	..	12657b	75	720	30.1	-58 33	9.2	9.6	F5	3	..	13007b
26	2901	29.8	-37 45	7.19	7.4	Fo	4	..	18558b	76	1220	30.2	+51 17	8.0	9.4	Mb	3	..	37419i
27	2730	29.8	-38 33	6.38	7.2	Ko	7	..	12657b	77	1167	30.2	+46 51	9.9	10.9	Ko	1	..	5400m
28	2532	29.8	-40 33	8.7	9.2	F8	2	..	12657b	78	1496	30.2	+44 21	9.0	10.2	K5	1	..	5400m
29	1954	29.8	-51 38	8.9	9.7	Ko	2	..	20547b	79	1650	30.2	+40 4	9.12	9.12	Ao	1	..	37397i
30	610	29.8	-65 30	6.38	6.7	F2	9	..	18485b	80	1164	30.2	+27 22	6.89	7.45	Go	6	..	38185i
31	624	29.8	-69 55	10.0	10.3	Fo	2	..	15168b	81	1210	30.2	+16 53	6.69	7.11	F5	6	..	37441i
32	1137	29.9	+55 59	8.8	8.8	Ao	2	..	38239i	82	1327	30.2	+13 14	7.7	8.7	Ko	3	..	38200i
33	1041	29.9	+53 17	10.2	10.2	A	1	..	37419i	83	1295	30.2	+ 9 56	7.92	7.87	B8	3	..	38200i
34	1286	29.9	+26 48	9.4	9.9	F8	2	..	38185i	84	1312	30.2	+ 5 35	8.3	9.7	Ma	1	..	38168i
35	1188	29.9	+10 55	8.4	9.5	K2	1	..	38200i	85	1288	30.2	- 1 26	8.1	9.5	Mb	2	..	38196i
36	1571	29.9	- 4 11	8.4	8.4	Ao	4	..	38196i	86	1481	30.2	- 8 17	9.1	10.1	Ko	2	..	20803b
37	1574	29.9	- 4 36	7.9	8.9	Ko	4	..	12671b	87	1545	30.2	-12 9	8.5	8.6	A3	4	..	12672b
38	1480	29.9	- 8 32	8.9	8.8	B5	6	..	20803b	88	1498	30.2	-14 32	10.2	11.2	Ko	2	..	24463b
39	1441	29.9	-20 4	9.08	8.8	Ao	2	..	20535b	89	1435	30.2	-15 23	9.6	9.6	Ao	2	..	24463b
40	3061	29.9	-33 45	8.7	9.2	Fo	1	..	18385b	90	1468	30.2	-18 44	8.1	8.2	A3	7	0,2	20535b
41	2732	29.9	-38 1	9.4	9.1	Ao	3	..	12657b	91	4046	30.2	-23 47	9.3	8.9	F2	3	..	20535b
42	2534	29.9	-43 30	8.0	9.5	K5	2	..	20556b	92	669	30.2	-61 48	6.34	5.8	B3	8	..	42927b
43	2734	29.9	-44 15	9.1	8.9	F5	3	0,2	45973b	93	948	30.3	+58 34	8.8	9.1	F2	3	..	38239i
44	264	30.0	+75 9	8.02	8.30	Fo	3	..	37343i	94	1406	30.3	+48 35	8.0	8.1	A2	4	..	37500i
45	1275	30.0	+30 11	8.5	8.9	F5	2	..	37527i	95	1572	30.3	+43 38	9.7	10.8	K2	1	..	5400m
46	1282	30.0	+29 48	8.61	8.61	A	2	..	37527i	96	1400	30.3	+19 38	8.1	8.1	Ao	5	..	37441i
47	1306	30.0	+17 45	7.4	8.4	Ko	3	..	37441i	97	1311	30.3	+17 48	9.3	9.4	A2	1	..	37441i
48	1331	30.0	+ 4 3	8.1	8.2	A2	4	..	38196i	98	1301	30.3	+ 2 24	8.7	8.8	A2	3	..	38196i
49	1618	30.0	- 6 37	9.2	9.8	G	2	..	20803b	99	1494	30.3	+ 0 35	8.4	8.7	Fo	3	..	38196i
50	1550	30.0	-13 58	10.1	10.7	Go	3	..	24463b	100	1350	30.3	- 0 4	9.13	9.13	Ao	2	..	38196i

THE HENRY DRAPER CATALOGUE.

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6h 30m 3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1668	30.3	- 2 46	9.1	9.5	F5	1	..	38196i	51	1553	30.5	-13 56	9.1	9.9	G5	3	..	24463b
2	1576	30.3	- 4 43	7.45	8.45	Ko	7	..	12671b	52	1542	30.5	-17 57	8.5	8.5	Ao	2	..	39861b
3	1695	30.3	- 5 30	9.0	9.6	Go	4	..	20803b	53	1491	30.5	-19 34	7.49	8.8	K5	4	..	20535b
4	1620	30.3	- 6 16	9.8	9.8	Ao	2	..	20803b	54	1446	30.5	-20 29	6.85	7.5	Ao	6	2,5	8904b
5	1482	30.3	- 8 48	8.7	8.7	B9	6	1,7	20803b	55	1447	30.5	-20 42	9.1	9.2	F5	1	..	20535b
6	1539	30.3	-11 27	9.2	9.3	A3	4	..	24463b	56	1506	30.5	-21 16	9.1	9.1	Go	1	..	20535b
7	1437	30.3	-15 57	8.9	9.2	Fo	4	..	39861b	57	4184	30.5	-24 8	8.9	9.0	Ao	4	..	20535b
8	1531	30.3	-16 6	8.9	9.0	A2	3	..	39861b	58	2740	30.5	-38 46	8.4	8.7	Ko	2	..	12657b
9	1530	30.3	-16 23	10.1	10.2	A2	2	E	24463b	59	2742	30.5	-44 59	8.34	9.5	K2	1	..	18483b
10	3369	30.3	-25 27	9.2	10.2	K5	1	E	24433b	60	722	30.5	-58 41	5.78	5.76	B9	..	1, R	56, 122
11	3368	30.3	-25 45	10.0	9.4	A5	4	3,1	24433b	61	657	30.5	-62 16	8.1	8.1	Ao	6	..	15147b
12	3104	30.3	-27 15	8.7	9.6	Ko	3	..	24433b	62	1106	30.6	+52 23	8.7	9.5	G5	1	..	37419i
13	3225	30.3	-29 33	6.76	7.3	A2	9	..	18385b	63	1654	30.6	+40 39	8.0	8.1	A2	2	..	37397i
14	3291	30.3	-30 15	7.7	8.6	F2	5	..	18385b	64	1350	30.6	+32 50	8.6	9.4	G5	2	..	37527i
15	2990	30.3	-36 9	5.45	6.7	K2	..	3,4	56, 122	65	1322	30.6	+24 16	9.0	9.0	Ao	2	..	38185i
16	2680	30.3	-39 34	8.0	8.6	G5	4	..	12657b	66	1425	30.6	+23 11	6.80	6.80	Ao	8	..	37441i
17	2594	30.3	-45 18	8.4	8.3	Ao	8	..	18483b	67	1315	30.6	+ 5 24	8.3	8.2	B5	3	..	20708b
18	721	30.3	-58 23	9.1	9.9	F5	2	..	13007b	68	1317	30.6	+ 5 23	9.6	9.6	B8	3	3,3	38168i
19	611	30.3	-65 57	7.6	8.6	Ko	5	..	18485b	69	1314	30.6	+ 3 25	8.5	9.3	G5	1	..	38196i
20	531	30.3	-68 21	9.5	10.3	G5	2	..	18485b	70	1312	30.6	+ 3 4	8.9	9.3	F5	1	..	20708b
21	180	30.3	-80 3	10.3	10.3	A	3	E	20652b	71	1669	30.6	- 2 9	7.9	8.4	F8	5	2,3	38196i
22	1328	30.4	+45 15	8.8	8.9	A2	7	2,3	5400m	72	1501	30.6	- 3 54	8.1	8.5	F5	3	..	38196i
23	1498	30.4	+44 2	9.4	10.4	Ko	1	..	5400m	73	1479	30.6	- 7 18	8.5	8.8	F2	6	..	20803b
24	1546	30.4	+38 30	8.4	8.5	A5	2	..	37397i	74	1543	30.6	-11 9	9.4	9.4	Ao	4	..	24463b
25	1329	30.4	+13 47	7.03	7.03	Ao	6	..	38200i	75	1549	30.6	-13 0	9.6	10.1	F8	2	..	24463b
26	1477	30.4	- 8 0	9.1	9.6	F8	1	..	20803b	76	2543	30.6	-43 13	9.0	9.2	F5	3	..	20556b
27	1592	30.4	-10 2	9.8	10.1	Fo	1	..	24463b	77	2309	30.6	-49 47	10.0	9.7	A2	1	..	18483b
28	1547	30.4	-12 32	7.7	8.2	F8	4	..	12672b	78	187	30.6	-81 3	9.8	9.8	Ao	2	..	20557b
29	1438	30.4	-15 15	9.1	9.6	F8	4	..	24463b	79	442	30.7	+67 9	9.4	9.4	Ao	2	..	38155i
30	1533	30.4	-16 36	9.2	9.3	A2	3	E	24463b	80	1476	30.7	+41 22	8.5	8.9	F5	3	..	37397i
31	1532	30.4	-16 53	10.1	10.4	F2	1	E	24463b	81	1169	30.7	+27 48	8.7	9.0	F2	2	..	38185i
32	1488	30.4	-19 9	9.1	9.2	Fo	1	..	20535b	82	1304	30.7	+21 44	9.0	9.1	A2	3	..	37441i
33	1489	30.4	-19 52	7.78	7.9	B8	7	..	20535b	83	1193	30.7	+10 22	7.8	7.6	B2	4	..	38200i
34	3226	30.4	-29 39	9.5	9.0	A3	2	..	18385b	84	1301	30.7	+ 6 28	8.7	9.7	Ko	1	..	38168i
35	2504	30.4	-46 5	9.6	9.5	A2	2	..	18483b	85	1335	30.7	+ 4 35	6.46	6.44	B9	8	..	38196i
36	2361	30.4	-48 28	6.90	7.7	F5	9	..	18483b	86	1355	30.7	- 1 1	8.4	8.4	B9	5	..	38196i
37	2268	30.4	-50 24	7.5	8.2	Go	5	..	18483b	87	1289	30.7	- 1 36	8.3	8.4	A2	2	..	38196i
38	1105	30.5	+52 5	8.2	9.2	Ko	1	..	37419i	88	1621	30.7	- 6 27	9.4	9.8	F5	2	..	20803b
39	1329	30.5	+50 38	7.9	8.9	Ko	4	..	37419i	89	1529	30.7	- 9 18	8.5	8.5	Ao	7	..	20803b
40	1370	30.5	+33 44	8.7	9.5	G5	2	..	37527i	90	1595	30.7	-10 30	8.6	9.7	K2	3	..	24463b
41	1356	30.5	+31 0	8.1	8.2	A3	3	..	37527i	91	1546	30.7	-11 36	8.9	9.7	G5	4	..	24463b
42	1321	30.5	+24 30	9.4	9.5	A2	1	..	38185i	92	1508	30.7	-21 55	8.7	8.0	Ao	6	..	20535b
43	1300	30.5	+21 23	8.8	8.8	B9	3	..	37441i	93	4059	30.7	-23 24	10.0	8.8	Fo	3	..	20535b
44	1312	30.5	+17 31	9.1	9.2	A5	1	..	37441i	94	1012	30.7	-55 34	7.9	8.7	G5	7	..	18484b
45	1298	30.5	+ 6 31	8.4	8.5	A2	2	..	38168i	95	589	30.7	-63 38	9.3	9.9	Go	2	..	15147b
46	1314	30.5	+ 5 56	8.8	8.6	B3	2	..	20708b	96	447	30.8	+68 44	8.0	9.0	Ko	4	..	38155i
47	1302	30.5	+ 2 47	8.9	8.7	B	1	R	20708b	97	1100	30.8	+55 14	8.8	8.9	A5	2	..	37419i
48	1353	30.5	- 0 34	8.9	8.9	B9	3	..	20708b	98	1521	30.8	+49 24	8.8	8.8	Ao	2	..	37438i
49	1352	30.5	- 0 52	8.9	9.0	A5	2	..	38196i	99	1404	30.8	+19 47	8.7	8.8	A2	2	..	37441i
50	1499	30.5	- 4 1	8.5	9.6	K2	3	..	12671b	100	1255	30.8	+15 50	7.13	7.13	Ao	5	0,4	37441i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

46900

6^h 30^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1303	30.8	+ 2 10	8.5	8.8	Fo	3	..	38196i	51	1487	31.0	- 8 28	9.1	10.1	Ko	3	..	20803b
2	1579	30.8	- 4 46	9.4	9.5	A3	2	..	20803b	52	1598	31.0	-10 22	8.7	8.7	Ao	6	..	24463b
3	1699	30.8	- 5 19	9.4	10.8	Mc	..	..	M	53	1548	31.0	-11 44	9.2	9.2	Ao	5	..	24463b
4	1698	30.8	- 5 45	9.1	9.5	F5	3	..	20803b	54	1444	31.0	-15 11	8.55	8.97	F5	4	..	39861b
5	1623	30.8	- 6 10	10.1	10.1	A	1	..	20803b	55	1445	31.0	-15 13	9.4	10.0	G	2	..	24463b
6	1547	30.8	-11 55	9.1	9.2	A2	2	..	12672b	56	1446	31.0	-15 56	8.1	8.4	Fo	5	..	39861b
7	1556	30.8	-13 13	8.9	8.9	Ao	7	..	24463b	57	1451	31.0	-20 43	9.2	9.4	G5	1	..	20535b
8	1499	30.8	-14 29	9.6	10.1	F8	3	..	24463b	58	4193	31.0	-24 20	9.2	9.0	A5	3	..	20535b
9	1441	30.8	-15 11	9.25	9.67	F5	2	..	24463b	59	3111	31.0	-27 12	9.2	9.3	A3	3	0,3-	20535b
10	1536	30.8	-16 57	8.9	9.7	G5	2	E	24463b	60	2913	31.0	-37 4	9.4	8.9	A	1	..	12657b
11	1509	30.8	-21 20	8.7	9.4	Ko	1	..	20535b	61	944	31.0	-52 11	8.6	8.8	Go	5	..	20547b
12	2087	30.8	-35 8	9.15	9.1	A5	2	..	12657b	62	537	31.1	+65 4	7.55	8.33	G5	7	..	37545i
13	2547	30.8	-41 0	8.7	8.9	F	2	R	12657b	63	949	31.1	+58 10	8.1	8.9	G5	6	..	38239i
14	2546	30.8	-43 47	8.0	8.9	Ko	2	..	12649b	64	1500	31.1	+44 10	8.8	9.8	Ko	2	..	5400m
15	2441	30.8	-47 25	8.0	8.9	G5	5	0,7	18483b	65	1317	31.1	+17 11	8.3	8.4	A2	2	..	37441i
16	2439	30.8	-47 55	10.2	9.5	A2	3	..	38414b	66	1303	31.1	+ 6 10	7.3	7.1	B2	6	..	38168i
17	1051	30.8	-54 11	8.4	9.6	K5	1	..	20547b	67	1319	31.1	+ 5 52	8.5	8.5	Ao	2	..	38168i
18	1050	30.8	-55 0	8.23	8.7	F8	7	..	18484b	68	1291	31.1	- 1 28	8.8	8.9	A5	2	..	38196i
19	590	30.8	-63 27	9.6	9.6	Ao	3	..	15147b	69	1533	31.1	- 9 22	8.6	8.6	B9	6	..	20803b
20	609	30.8	-67 32	8.8	9.6	G5	3	..	18485b	70	1599	31.1	-10 54	8.5	9.5	Ko	5	..	24463b
21	449	30.8	-71 26	8.4	8.5	A3	2	1,9	9062b	71	3241	31.1	-30 1	6.96	8.6	K5	4	..	18385b
22	393	30.8	-76 36	10.2	10.8	Go	2	..	20652b	72	3437	31.1	-31 13	7.5	9.2	K5	3	..	18385b
23	1684	30.9	+39 52	9.37	9.87	F8	1	..	37397i	73	3080	31.1	-33 56	6.72	6.8	Fo	5	5,9	9042b
24	1358	30.9	+31 47	7.8	8.8	Ko	1	..	37527i	74	2594	31.1	-42 1	7.6	8.3	G5	5	..	12649b
25	1499	30.9	+ 0 3	9.1	9.9	G5	2	..	12671b	75	558	31.1	-66 48	8.1	9.5	Mb	4	..	18485b
26	1671	30.9	- 2 30	8.5	8.6	A2	3	..	38196i	76	532	31.1	-68 52	7.9	7.9	B9	8	..	18485b
27	1503	30.9	- 3 6	7.5	8.6	K2	3	..	38196i	77	528	31.1	-70 24	9.7	10.0	F2	3	..	15167b
28	1504	30.9	- 3 50	9.2	9.5	Fo	2	..	20803b	78	148	31.1	-82 55	8.1	8.2	A2	7	..	20557b
29	1700	30.9	- 5 48	8.3	9.1	G5	5	..	20803b	79	410	31.2	+70 41	8.2	8.8	Go	3	..	38169i
30	1484	30.9	- 8 24	9.2	10.4	K5	1	..	20803b	80	1107	31.2	+52 30	9.4	9.5	A3	1	..	37419i
31	1486	30.9	- 8 55	7.9	8.9	Ko	7	..	20803b	81	1501	31.2	+44 24	7.8	8.1	F2	6	2,3	5400m
32	1449	30.9	-20 19	7.9	7.9	B9	6	..	20535b	82	1574	31.2	+43 7	9.7	10.0	F	1	..	5400m
33	1458	30.9	-22 53	4.54	4.54	Ao	..	0, R	28,198	83	1581	31.2	+42 6	8.6	8.7	A2	2	..	37397i
34	3109	30.9	-27 4	10.4	9.7	F5	2	..	24433b	84	1406	31.2	+19 14	7.5	8.5	Ko	3	..	37441i
35	3431	30.9	-31 45	9.0	8.9	A3	3	..	18385b	85	1356	31.2	+13 58	8.8	8.8	A	1	..	38200i
36	3168	30.9	-32 38	5.57	5.4	B9	..	0,6-	56,122	86	1305	31.2	+ 6 3	9.3	9.4	A2	3	..	20708b
37	1013	30.9	-57 48	9.5	9.6	A2	3	..	13007b	87	1507	31.2	- 3 34	9.2	9.3	A2	3	..	12671b
38	649	30.9	-60 31	8.9	10.5	K2	1	..	15147b	88	1483	31.2	- 7 44	9.2	9.5	F2	1	..	20803b
39	610	30.9	-67 3	9.5	9.6	A5	3	..	18485b	89	1601	31.2	-10 15	9.4	10.4	Ko	1	..	24463b
40	598	31.0	+64 45	9.4	10.0	G	2	..	37545i	90	1550	31.2	-11 18	7.19	8.19	Ko	4	..	12672b
41	654	31.0	+63 3	10.2	10.2	B9	2	..	37545i	91	1553	31.2	-12 7	10.2	10.2	Ao	2	..	24463b
42	1573	31.0	+43 19	8.5	9.6	K2	3	0,1	5400m	92	1559	31.2	-13 52	9.1	9.7	Go	4	..	24463b
43	1685	31.0	+39 30	9.1	9.2	A2	1	..	37397i	93	4198	31.2	-24 37	8.9	9.6	Ko	1	..	20535b
44	1184	31.0	+28 3	9.1	9.9	G5	1	..	38185i	94	3380	31.2	-25 45	7.8	7.5	B8	5	..	8904b
45	1326	31.0	+24 29	9.0	9.4	F5	1	..	38185i	95	3113	31.2	-27 41	10.7	9.6	Ao	3	..	24433b
46	1243	31.0	+11 57	8.2	8.2	Ao	4	..	38200i	96	3438	31.2	-31 46	8.3	8.0	B9	6	1,2	18385b
47	1302	31.0	+ 6 20	8.4	9.6	K5	1	..	20708b	97	3171	31.2	-32 13	8.4	7.8	B8	5	1,2	12657b
48	1306	31.0	+ 2 10	9.3	9.4	A3	2	..	38196i	98	2515	31.2	-46 25	9.2	9.3	Fo	2	2,2	45973b
49	1506	31.0	- 3 54	7.9	8.0	A2	5	2,3	38196i	99	2445	31.2	-47 14	9.2	9.8	G5	4	..	38414b
50	1485	31.0	- 8 18	9.4	9.7	Fo	2	..	20803b	100	2274	31.2	-50 18	9.6	9.4	F5	3	..	38414b

THE HENRY DRAPER CATALOGUE.

47000

6^h 31^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	947	31.2	-52 15	6.14	7.7	G5	9	..	20547b	51	1410	31.6	+22 48	7.7	8.8	K2	2	..	3744ii
2	946	31.2	-52 24	8.9	9.7	Ko	3	..	20547b	52	1308	31.6	+21 48	8.8	9.6	G5	1	..	3744ii
3	230	31.2	-78 30	10.9	11.2	Fo	4	..	20652b	53	1510	31.6	- 3 31	9.1	9.2	A3	2	..	12671b
4	538	31.3	+65 7	8.40	8.96	Go	4	..	37545i	54	1710	31.6	- 5 8	5.48	5.46	B9	..	1,8	56,83
5	867	31.3	+62 1	6.55	6.61	A2	9	..	37545i	55	1489	31.6	- 8 45	8.9	10.1	K5	2	..	20803b
6	1373	31.3	+33 2	9.5	9.5	A	1	..	37527i	56	1552	31.6	-11 29	10.1	10.2	A3	2	..	24463b
7	1703	31.3	- 5 44	8.4	9.4	Ko	5	..	20803b	57	..	31.6	-13 42	..	..	A2	1	..	24463b
8	1554	31.3	-12 54	10.1	10.7	Go	2	..	24463b	58	1561	31.6	-13 43	9.1	10.2	K2	2	..	24463b
9	1560	31.3	-13 40	8.5	8.5	Ao	8	..	24463b	59	1502	31.6	-14 15	9.8	9.8	B8	5	..	24463b
10	1501	31.3	-14 35	9.2	9.3	A2	5	..	24463b	60	1449	31.6	-15 7	9.41	9.49	A3	2	..	24463b
11	1448	31.3	-16 1	7.9	7.9	B9	7	1,4	39861b	61	3451	31.6	-31 31	7.9	7.4	B8	3	5,8	9042b
12	1514	31.3	-22 2	6.53	7.7	Ko	6	0,3	8904b	62	3448	31.6	-31 43	8.0	9.2	K2	3	..	18385b
13	3306	31.3	-30 51	7.9	8.9	A3	3	..	18385b	63	2609	31.6	-45 32	9.1	9.9	Ko	1	..	18483b
14	3441	31.3	-31 35	8.3	9.0	Fo	3	..	18385b	64	1056	31.6	-54 2	7.9	8.4	Ao	5	..	18484b
15	3175	31.3	-32 55	9.4	9.2	G5	2	..	18385b	65	1057	31.6	-54 31	8.7	9.0	F8	3	0,3	13007b
16	3084	31.3	-33 7	9.4	9.2	G5	1	..	18385b	66	728	31.6	-58 58	9.4	10.2	G5	1	..	13007b
17	2964	31.3	-34 45	8.7	8.6	Go	3	..	12657b	67	387	31.6	-73 31	9.4	10.4	Ko	2	..	20652b
18	90	31.3	-85 1	8.3	9.3	Ko	3	..	15145b	68	395	31.6	-76 40	10.0	10.4	F5	3	..	20652b
19	1330	31.4	+45 8	8.8	10.0	K5	2	..	5400m	69	1331	31.7	+44 59	9.12	10.30	K5	1	..	5400m
20	1328	31.4	+24 40	6.44	6.50	A2	8	..	38185i	70	1690	31.7	+39 29	5.71	6.71	Ko	7	..	37397i
21	1359	31.4	+13 59	8.2	8.6	F5	2	..	38200i	71	1354	31.7	+32 35	8.7	9.0	F2	2	..	37527i
22	1420	31.4	+ 1 8	8.1	8.1	B9	6	..	38196i	72	1326	31.7	+ 5 36	7.5	7.6	A2	5	..	38196i
23	1551	31.4	-11 44	9.4	9.7	Fo	4	..	24463b	73	1347	31.7	+ 4 47	8.20	8.26	A2	4	..	20708b
24	3389	31.4	-25 46	9.7	9.3	Fo	5	..	24433b	74	1421	31.7	+ 1 24	8.9	9.0	A2	3	2,2	12671b
25	2965	31.4	-34 58	7.34	8.0	G5	5	..	12657b	75	1505	31.7	+ 0 3	8.93	8.93	Ao	3	..	20708b
26	2371	31.4	-48 4	9.8	9.2	B9	3	..	18483b	76	1490	31.7	- 8 16	9.2	9.3	A2	3	..	20803b
27	1015	31.4	-55 20	8.9	9.9	Ko	1	..	13007b	77	1537	31.7	- 9 45	8.0	8.3	Fo	8	..	20803b
28	671	31.4	-59 11	8.9	9.9	Ko	3	..	13007b	78	1603	31.7	-11 0	10.1	11.1	Ko	1	..	24463b
29	1502	31.5	+44 31	10.2	10.2	A	1	..	5400m	79	1562	31.7	-13 21	9.1	9.1	Ao	7	..	24463b
30	1576	31.5	+43 26	8.9	9.0	A2	3	..	5400m	80	2598	31.7	-42 19	8.3	8.7	Fo	2	..	12649b
31	1408	31.5	+22 14	7.8	7.8	Ao	7	..	3744ii	81	2376	31.7	-48 29	9.4	9.4	F8	2	..	18483b
32	1341	31.5	+ 4 46	8.70	8.51	B2	1	..	20708b	82	458	31.8	+66 56	8.8	9.8	Ko	3	..	37545i
33	1504	31.5	+ 0 37	8.5	8.8	Fo	2	..	38196i	83	459	31.8	+66 1	9.5	10.0	F8	2	..	37545i
34	1581	31.5	- 4 53	8.75	9.03	Fo	5	..	20803b	84	..	31.8	+46 0	..	..	G5	1	..	5400m
35	1707	31.5	- 5 57	9.1	10.1	Ko	2	..	20803b	85	1553	31.8	+37 12	8.0	8.3	Fo	5	..	37527i
36	1602	31.5	-10 45	9.1	9.1	B9	4	..	24463b	86	1433	31.8	+23 41	6.78	7.78	Ko	6	..	3744ii
37	1557	31.5	-12 45	9.1	10.1	Ko	3	..	24463b	87	1249	31.8	+11 12	7.9	8.0	A2	3	..	38200i
38	1556	31.5	-12 52	9.1	9.1	B9	5	..	24463b	88	1308	31.8	+ 6 8	8.3	8.3	B8	4	..	38168i
39	1537	31.5	-16 43	8.9	8.9	Ao	3	..	39861b	89	1348	31.8	+ 4 44	9.6	9.6	B9	2	..	20708b
40	1476	31.5	-18 14	8.9	8.9	Ao	3	..	39861b	90	1296	31.8	- 1 50	8.1	8.4	Fo	4	..	12671b
41	3392	31.5	-25 58	8.0	8.7	F8	5	..	12656b	91	1628	31.8	- 6 17	9.2	9.3	A2	4	..	20803b
42	3162	31.5	-26 47	9.2	9.9	Ko	2	..	24433b	92	1488	31.8	- 7 13	8.6	8.6	Ao	7	..	20803b
43	2597	31.5	-42 12	8.3	9.9	K5	1	..	20556b	93	1505	31.8	-14 16	9.6	10.4	G5	3	..	24463b
44	611	31.5	-67 30	8.8	8.9	A5	7	..	18485b	94	2555	31.8	-40 57	8.5	8.9	F2	3	..	12657b
45	219	31.5	-79 39	9.2	10.0	G5	2	..	20557b	95	673	31.8	-61 45	7.2	8.4	Ko	7	..	15147b
46	1480	31.6	+41 40	6.79	6.77	B9	5	E	37500i	96	540	31.9	+65 20	9.5	10.6	K2	3	..	37545i
47	1663	31.6	+40 26	7.47	8.47	Ko	4	..	37397i	97	951	31.9	+58 31	9.4	9.4	Ao	1	..	38239i
48	1689	31.6	+39 12	8.0	9.2	K5	2	5,1	3894ii	98	1577	31.9	+43 54	10.2	10.3	A3	1	..	5400m
49	1412	31.6	+34 55	8.92	8.92	Ao	2	..	3894ii	99	1482	31.9	+41 35	7.72	8.90	K5	3	..	37397i
50	1363	31.6	+30 58	7.23	7.29	A2	6	..	37527i	100	1665	31.9	+39 59	5.28	5.23	B8	..	0, R	56,83

ANNALS OF HARVARD COLLEGE OBSERVATORY.

47100

6^h 31^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1364	31.9	+31 18	8.1	8.7	Go	2	..	37527i	51	1366	32.1	+31 33	8.8	9.3	F8	1	..	37527i
2	1331	31.9	+24 56	8.91	8.97	A2	1	..	38185i	52	1293	32.1	+29 4	5.54	5.54	Ao	9	..	38185i
3	1508	31.9	+20 2	9.00	9.00	A	1	..	37441i	53	1415	32.1	+19 31	8.3	9.3	Ko	1	..	37441i
4	1288	31.9	+18 29	7.43	7.38	B8	7	..	37441i	54	1326	32.1	+17 10	8.8	8.8	A	1	..	37441i
5	1223	31.9	+16 29	1.93	1.93	Ao	..	R	6344c	55	1262	32.1	+15 7	8.44	9.22	G5	1	..	38200i
6	1303	31.9	+ 9 27	8.1	8.1	Ao	2	..	38200i	56	1201	32.1	+10 56	6.60	7.60	Ko	5	..	38200i
7	1329	31.9	+ 5 53	7.7	7.7	Ao	3	..	38168i	57	1306	32.1	+ 9 13	7.5	8.3	G5	3	..	38200i
8	1320	31.9	+ 3 14	9.3	9.4	A2	3	..	20708b	58	1323	32.1	+ 3 5	8.9	9.9	Ko	2	5,1	38168i
9	1506	31.9	+ 0 21	9.3	9.8	F8	3	..	12671b	59	1299	32.1	- 1 3	8.9	9.0	A3	1	..	38196i
10	1297	31.9	- 1 9	9.1	9.1	A	1	..	38196i	60	1680	32.1	- 2 6	7.01	6.99	B9	8	0,9 R	38196i
11	1298	31.9	- 1 59	8.52	9.52	Ko	1	..	12671b	61	1632	32.1	- 6 8	9.8	9.9	A2	2	..	20803b
12	1629	31.9	- 6 48	8.7	8.8	A5	7	..	20803b	62	1543	32.1	- 9 47	9.1	10.1	Ko	2	..	24463b
13	1604	31.9	-10 53	9.2	10.0	G5	2	..	24463b	63	1553	32.1	-11 30	9.0	10.2	K5	3	..	24463b
14	1452	31.9	-15 8	10.7	10.7	Ao	1	..	24463b	64	1567	32.1	-13 45	9.4	9.4	Ao	3	..	24463b
15	1453	31.9	-15 43	10.1	10.2	A3	2	E	24463b	65	1455	32.1	-20 23	9.4	8.9	Ao	2	..	20535b
16	4209	31.9	-24 1	7.5	7.9	B9	5	..	8904b	66	1467	32.1	-22 27	9.4	9.4	G5	1	..	20535b
17	3318	31.9	-30 22	8.7	9.2	A2	2	..	18385b	67	3254	32.1	-29 59	9.15	9.5	Ko	2	..	24433b
18	3317	31.9	-30 47	8.3	8.9	B8	4	..	18385b	68	3011	32.1	-36 10	7.10	7.1	Ao	4	0,8	18558b
19	2524	31.9	-46 26	8.8	8.6	Fo	7	..	18483b	69	2456	32.1	-47 18	7.3	8.3	Ko	6	..	38414b
20	651	31.9	-60 58	9.9	10.0	A5	2	..	15147b	70	124	32.1	-83 3	10.0	10.1	A3	3	..	20557b
21	616	31.9	-65 14	7.74	8.3	Fo	6	..	18485b	71	1139	32.2	+56 58	8.0	8.0	Ao	8	..	38239i
22	231	31.9	-79 0	9.8	10.4	Go	2	..	20652b	72	1504	32.2	+44 45	9.7	10.0	Fo	3	..	5400m
23	1002	32.0	+59 0	9.2	9.5	Fo	1	..	38239i	73	1578	32.2	+43 30	10.2	11.0	G5	1	..	5400m
24	1503	32.0	+44 35	8.7	9.5	G5	3	..	5400m	74	1585	32.2	+42 35	5.09	5.87	G5	9	R	37500i
25	1415	32.0	+34 8	9.4	9.5	A3	2	..	38941i	75	1353	32.2	+25 50	8.7	9.1	F5	1	..	38185i
26	1261	32.0	+15 15	8.3	8.9	Go	1	..	38200i	76	1332	32.2	+24 32	6.70	6.84	A5	6	..	38185i
27	1219	32.0	+12 17	7.6	8.4	G5	7	..	38200i	77	1418	32.2	+19 58	8.60	9.16	G	1	..	37441i
28	1222	32.0	+12 14	8.3	8.8	F8	2	..	38200i	78	1226	32.2	+16 4	8.4	8.4	Ao	4	2,3	37441i
29	1309	32.0	+ 6 13	6.06	5.82	Bop	8	R	20708b	79	1331	32.2	+ 5 45	7.9	8.4	F8	2	..	20708b
30	1424	32.0	+ 1 12	9.3	9.3	Ao	3	..	20708b	80	1587	32.2	- 4 33	9.8	9.8	A	1	..	20803b
31	1362	32.0	- 0 54	8.8	8.9	A5	3	..	12671b	81	1554	32.2	-11 20	8.1	8.4	Fo	4	..	12672b
32	1513	32.0	- 3 30	8.6	8.7	A5	5	..	12671b	82	1570	32.2	-13 14	6.40	7.58	K5	6	..	12672b
33	1586	32.0	- 4 21	9.2	10.4	K5	1	..	20803b	83	1569	32.2	-13 42	8.5	9.3	G5	6	..	24463b
34	1491	32.0	- 8 29	9.6	9.6	B8	2	..	20803b	84	1469	32.2	-22 51	9.8	9.4	A2	2	..	20535b
35	1541	32.0	- 9 8	8.9	10.0	K2	3	..	20803b	85	3173	32.2	-26 2	8.0	9.1	Ko	3	..	12656b
36	1506	32.0	-14 30	10.5	11.6	K2	3	..	24463b	86	3124	32.2	-27 32	7.9	8.7	G5	6	0,3	24433b
37	1481	32.0	-18 16	8.5	8.9	F5	3	..	39861b	87	2932	32.2	-37 46	7.6	8.2	K2	4	..	12657b
38	1480	32.0	-18 35	5.81	6.59	G5	6	0,6 R	8902b	88	2764	32.2	-44 12	9.4	9.5	Ao	2	..	45973b
39	1501	32.0	-19 24	7.28	7.3	Ao	4	1,7	8902b	89	1978	32.2	-51 36	9.6	9.4	Ao	3	..	20547b
40	4211	32.0	-24 21	9.3	9.6	G5	1	..	20535b	90	1110	32.2	-56 40	9.4	9.7	Fo	2	..	13007b
41	4210	32.0	-24 46	7.64	8.8	K2	7	..	20535b	91	672	32.2	-59 3	9.5	10.5	Ko	1	..	13007b
42	3168	32.0	-26 23	9.7	9.7	Ko	2	..	24433b	92	534	32.2	-68 2	8.1	8.5	F5	5	..	18485b
43	3091	32.0	-33 8	8.7	8.9	Ao	2	..	18385b	93	1586	32.3	+42 5	8.2	8.2	Ao	3	..	37500i
44	3009	32.0	-36 42	5.60	5.6	B9	..	0,6-	56,122	94	1416	32.3	+34 23	8.2	8.5	Fo	3	..	37527i
45	2929	32.0	-37 22	8.0	8.8	K5	2	..	12657b	95	1417	32.3	+34 3	9.1	9.1	A	2	..	38941i
46	2761	32.0	-38 44	7.18	7.2	B8	5	..	18558b	96	1181	32.3	+26 59	8.0	8.0	Ao	4	..	38185i
47	2613	32.0	-45 13	9.4	9.5	A5	2	..	18483b	97	1312	32.3	+21 57	8.4	9.6	K5	2	..	38185i
48	2526	32.0	-46 34	9.6	9.5	A2	1	..	18483b	98	1333	32.3	+ 5 1	8.01	9.01	Ko	3	5,1	20708b
49	618	32.0	-65 17	8.3	8.3	Ao	6	..	18485b	99	1363	32.3	- 0 47	8.7	9.8	K2	2	..	38196i
50	1109	32.1	+52 4	8.6	9.6	Ko	1	..	37419i	100	1606	32.3	-10 48	8.9	9.0	A3	6	..	24463b

THE HENRY DRAPER CATALOGUE.

47200

6^h 32^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1560	32.3	-12 45	9.6	10.2	Go	3	..	24463b	51	1019	32.5	-55 21	9.4	10.0	Go	1	..	13007b
2	1559	32.3	-12 46	9.1	9.1	B ₉	5	..	24463b	52	536	32.5	-68 37	8.5	9.5	Ko	4	..	18485b
3	1571	32.3	-13 23	9.2	9.2	Ao	3	..	24463b	53	396	32.5	-76 1	10.0	10.5	F8	2	..	20652b
4	1554	32.3	-17 9	8.9	9.0	A ₂	3	..	39861b	54	1140	32.6	+56 10	7.09	8.09	Ko	4	E	37419i
5	1502	32.3	-19 10	4.14	5.8	Ko	..	O, R	56,83	55	1369	32.6	+31 51	7.31	7.31	Ao	5	..	37527i
6	1471	32.3	-22 16	9.8	9.4	Ao	2	..	20535b	56	1182	32.6	+27 53	7.20	7.26	A ₂	5	..	38185i
7	3174	32.3	-26 27	7.64	9.0	K ₅	4	..	12656b	57	1323	32.6	+2 21	7.18	7.16	B ₉	7	..	38196i
8	3184	32.3	-28 16	9.3	9.9	A ₂	2	..	24433b	58	1365	32.6	-0 6	9.03	9.09	A ₂	2	..	38196i
9	3183	32.3	-28 45	7.17	8.7	K ₂	4	O, 7	42931b	59	1637	32.6	-6 4	9.8	9.8	A	2	..	20803b
10	3257	32.3	-29 18	9.2	9.5	Ko	2	..	24433b	60	1572	32.6	-13 43	9.1	9.9	G ₅	3	..	24463b
11	2290	32.3	-50 2	8.54	8.8	F ₂	3	..	18483b	61	1511	32.6	-14 11	9.0	9.5	F8	5	..	24463b
12	1060	32.3	-54 54	9.78	9.9	Fo	1	..	13007b	62	1454	32.6	-15 25	8.7	8.8	A ₂	4	..	39861b
13	533	32.3	-70 26	7.4	7.9	F8	3	..	9062b	63	1524	32.6	-21 18	9.1	9.1	Fo	3	..	20535b
14	491	32.3	-72 6	9.3	9.7	F ₅	2	..	15167b	64	3406	32.6	-25 8	9.45	9.6	Ao	3	..	20535b
15	460	32.4	+66 17	7.12	7.62	F8	8	..	37545i	65	2562	32.6	-40 58	7.6	8.6	Ko	4	..	12657b
16	1377	32.4	+33 7	7.17	7.45	Fo	5	..	37527i	66	2476	32.6	-41 24	8.1	9.6	K ₅	1	..	20556b
17	1300	32.4	+26 36	8.8	8.8	Ao	2	..	38185i	67	2771	32.6	-44 59	8.64	9.3	K ₂	2	..	18483b
18	1252	32.4	+11 46	8.2	9.0	G ₅	4	..	38200i	68	2384	32.6	-48 3	9.2	10.8	K ₅	1	..	38414b
19	1311	32.4	+6 35	8.3	9.3	Ko	3	..	38168i	69	443	32.7	+67 28	9.4	10.0	Go	1	..	38155i
20	1315	32.4	+2 48	6.42	7.42	Ko	7	..	38196i	70	1506	32.7	+44 6	6.51	7.51	Ko	5	O, 8	37500i
21	1431	32.4	+1 54	7.9	7.9	B ₉	6	..	38196i	71	1253	32.7	+10 59	8.7	9.3	Go	1	..	38200i
22	1429	32.4	+1 18	9.3	9.4	A ₃	2	..	12671b	72	1355	32.7	+4 21	8.3	8.3	Ao	4	..	38196i
23	1545	32.4	-9 16	9.1	9.4	Fo	4	..	20803b	73	1435	32.7	+1 18	8.9	9.0	A ₅	3	5, 2	12671b
24	1561	32.4	-12 7	9.6	9.6	Ao	4	..	24463b	74	1512	32.7	+0 36	7.4	7.4	Ao	7	..	38196i
25	1508	32.4	-14 19	10.2	11.2	Ko	2	..	24463b	75	1517	32.7	-3 36	9.1	9.2	A ₃	3	..	12671b
26	1509	32.4	-14 35	9.2	9.8	Go	5	..	24463b	76	1714	32.7	-5 7	10.1	10.1	Ao	2	..	20803b
27	1462	32.4	-20 18	9.4	9.1	A ₅	2	..	20535b	77	1494	32.7	-7 59	9.4	9.4	Ao	2	..	20803b
28	3261	32.4	-29 13	11.8	10.0	Ko	1	..	24433b	78	1496	32.7	-8 9	7.15	7.13	B ₉	10	..	20803b
29	3008	32.4	-35 5	7.50	7.9	F ₅	6	..	12657b	79	1474	32.7	-22 11	8.3	9.1	Mb	4	5, 1	20535b
30	3005	32.4	-36 0	6.28	7.1	F ₅	4	O, 5-	9042b	80	1475	32.7	-22 56	9.1	9.4	Ao	4	R	20535b
31	2604	32.4	-42 12	9.1	9.2	F ₅	3	..	20556b	81	3410	32.7	-25 38	8.9	9.0	A ₂	5	..	20535b
32	1980	32.4	-51 8	8.2	8.3	F8	6	2, 2-	38414b	82	3468	32.7	-31 48	6.80	7.2	F ₂	4	2, 8	9042b
33	1018	32.4	-55 9	8.88	9.4	K ₂	2	..	18484b	83	3020	32.7	-36 3	7.15	7.8	Go	5	O, 2	12657b
34	1111	32.4	-57 0	8.8	9.6	Ko	3	..	18484b	84	2608	32.7	-42 59	9.1	9.5	A ₅	1	..	20556b
35	674	32.4	-61 32	9.5	10.5	Ko	2	..	15147b	85	2386	32.7	-48 7	9.1	9.4	G ₅	3	O, 2	38414b
36	1110	32.5	+52 54	8.7	8.8	A ₂	3	..	37419i	86	1110	32.7	-53 12	7.0	8.7	K ₅	4	..	20547b
37	1334	32.5	+45 32	9.7	9.7	Ao	3	..	5400m	87	654	32.7	-60 12	9.3	9.9	Go	2	..	15147b
38	1471	32.5	+36 46	8.2	9.0	G ₅	1	..	38941i	88	656	32.8	+63 35	8.7	9.8	K ₂	2	..	37545i
39	1312	32.5	+6 46	8.9	9.9	Ko	2	..	38168i	89	1524	32.8	+49 35	8.7	8.7	Ao	2	..	37438i
40	1334	32.5	+5 3	6.16	5.94	B ₁	7	1, 8	38168i	90	1508	32.8	+44 57	9.17	9.23	A ₂	5	..	5400m
41	1318	32.5	+2 11	7.9	7.9	Ao	5	..	38196i	91	1297	32.8	+29 50	8.16	8.14	B ₉	3	..	37527i
42	1301	32.5	-1 32	8.2	8.3	A ₃	4	..	38196i	92	1382	32.8	+7 14	7.30	7.25	B ₈	5	..	38168i
43	1558	32.5	-11 16	9.2	9.3	A ₂	5	..	24463b	93	1338	32.8	+5 54	8.8	8.9	A ₂	2	..	38168i
44	1562	32.5	-12 39	8.6	9.2	Go	8	..	24463b	94	1356	32.8	+4 10	9.3	9.8	F8	2	..	20708b
45	1510	32.5	-14 28	9.2	10.2	Ko	3	..	24463b	95	1330	32.8	+3 47	8.4	9.6	K ₅	1	..	38168i
46	1542	32.5	-16 16	7.8	7.8	B ₉	6	O, 2	39861b	96	1367	32.8	-0 35	8.1	8.1	B ₈	5	..	38196i
47	1472	32.5	-22 32	6.23	6.6	B ₈	..	3, 8-	28,198	97	1590	32.8	-4 18	9.1	9.7	Go	4	..	20803b
48	3180	32.5	-26 31	9.5	9.6	Fo	3	..	24433b	98	1715	32.8	-5 43	9.4	9.8	F ₅	3	..	20803b
49	3262	32.5	-29 53	10.2	9.6	A	1	..	24433b	99	1498	32.8	-8 34	8.5	8.3	B ₃	6	R	20803b
50	2323	32.5	-49 17	9.1	9.1	F ₅	3	O, 2	18483b	100	1549	32.8	-9 18	8.6	8.5	B ₅	7	..	20803b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

47300

6^h 32^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1608	32.8	-10 49	9.4	10.4	Ko	2	..	24463b	51	2467	33.0	-47 12	9.0	9.5	Ko	3	..	38414b
2	1563	32.8	-12 36	8.9	9.9	Ko	4	..	24463b	52	2466	33.0	-47 21	7.28	8.3	Ko	7	..	38414b
3	1466	32.8	-20 29	9.2	9.1	Ao	2	..	20535b	53	735	33.0	-58 43	9.6	10.7	K2	1	..	13007b
4	3269	32.8	-29 7	9.7	9.5	Ao	2	..	24433b	54	541	33.1	+65 9	8.8	9.1	F2	4	..	37545i
5	3021	32.8	-36 33	8.4	7.9	A3	4	2,2	12657b	55	1049	33.1	+53 29	7.6	8.0	F5	6	..	37419i
6	953	32.8	-52 53	4.44	4.44	Ao	..	R	28,199	56	1334	33.1	+50 13	9.2	9.2	B9	2	..	37419i
7	655	32.8	-60 30	8.8	9.6	F2	4	..	15147b	57	1580	33.1	+43 43	9.4	10.8	Ma	1	..	5400m
8	676	32.8	-61 46	9.8	10.8	Ko	1	..	15147b	58	1416	33.1	+22 7	6.28	7.28	Ko	8	..	37441i
9	1112	32.9	+52 4	7.52	8.08	Go	5	..	37419i	59	1340	33.1	+4 58	8.81	8.57	B	3	R	20708b
10	1169	32.9	+46 41	8.9	9.3	F5	3	..	5400m	60	1360	33.1	+4 43	8.3	8.2	B5	3	..	20708b
11	1589	32.9	+42 39	8.9	9.2	Fo	2	..	37397i	61	1515	33.1	+0 11	9.3	9.4	A2	2	..	38196i
12	1338	32.9	+24 38	9.0	9.0	Ao	2	..	38185i	62	1306	33.1	-1 21	8.1	9.1	Ko	6	..	38196i
13	1230	32.9	+12 50	7.9	8.2	Fo	4	..	38200i	63	1500	33.1	-8 15	10.1	10.9	G5	1	..	20803b
14	1316	32.9	+6 4	8.4	8.4	B8	4	..	20708b	64	1499	33.1	-8 42	7.30	8.30	Ko	8	..	20803b
15	1437	32.9	+1 6	8.94	9.94	Ko	1	0,1	12671b	65	1552	33.1	-9 58	9.2	9.2	Ao	3	..	24463b
16	1303	32.9	-1 31	9.1	9.2	A3	3	..	38196i	66	1566	33.1	-12 54	6.21	7.21	Ko	7	..	12672b
17	1562	32.9	-11 16	9.4	9.4	B9	4	..	24463b	67	1456	33.1	-15 18	9.2	9.3	A5	2	..	39861b
18	1561	32.9	-11 22	8.7	9.7	Ko	4	..	24463b	68	1458	33.1	-16 0	9.2	10.2	Ko	2	E	24463b
19	1563	32.9	-11 55	10.5	10.6	A5	1	..	24463b	69	1506	33.1	-19 42	7.54	7.6	B8	6	..	20535b
20	..	32.9	-12 21	..	..	A2	2	..	24463b	70	1470	33.1	-20 30	9.4	9.2	B9	2	..	20535b
21	1564	32.9	-12 39	10.5	10.5	Ao	1	..	24463b	71	2295	33.1	-50 13	6.78	8.1	Ko	7	..	18483b
22	1512	32.9	-14 53	9.03	9.53	F8	2	..	39861b	72	667	33.1	-62 45	9.2	10.4	K5	1	..	15147b
23	1455	32.9	-15 41	9.4	10.6	K5	1	E	24463b	73	600	33.2	+64 11	7.9	8.9	Ko	5	..	37545i
24	1560	32.9	-17 52	8.7	9.0	Fo	3	..	39861b	74	1527	33.2	+49 7	8.7	10.1	Ma	..	..	M
25	1487	32.9	-18 27	8.1	9.2	K2	1	..	39861b	75	1411	33.2	+48 19	8.2	8.7	F8	4	..	37500i
26	1467	32.9	-20 58	9.4	9.4	F5	1	..	20535b	76	1290	33.2	+30 24	8.0	8.0	Ao	3	..	37527i
27	3184	32.9	-26 40	8.3	8.7	Fo	3	..	12656b	77	1361	33.2	+25 37	8.6	9.4	G5	1	..	38185i
28	3186	32.9	-26 57	8.7	9.6	F5	3	..	24433b	78	1440	33.2	+23 32	9.1	9.2	A2	2	..	38185i
29	3196	32.9	-28 8	11.2	10.2	Fo	2	..	24433b	79	1424	33.2	+19 41	7.9	8.2	Fo	4	..	37441i
30	2387	32.9	-48 23	9.2	9.4	G5	3	..	38414b	80	1333	33.2	+17 52	8.4	9.2	G5	1	..	37441i
31	398	32.9	-76 3	9.4	10.4	Ko	2	..	20652b	81	1268	33.2	+15 18	7.84	8.26	F5	2	..	37441i
32	258	32.9	-77 13	6.98	7.2	Ao	10	..	20652b	82	1361	33.2	+4 42	7.9	7.8	B5	5	3,6	38168i
33	1336	33.0	+45 27	9.5	10.1	G	1	..	5400m	83	1332	33.2	+3 27	8.4	8.4	Ao	2	..	38168i
34	1510	33.0	+44 44	9.9	10.2	F	1	..	5400m	84	1593	33.2	-4 37	9.1	10.1	Ko	2	..	20803b
35	1509	33.0	+44 25	6.82	7.60	G5	5	5,8	37500i	85	1495	33.2	-7 10	8.9	9.5	Go	2	..	20803b
36	1331	33.0	+17 37	9.3	9.3	Ao	2	..	37441i	86	1553	33.2	-9 11	8.3	8.3	B8	8	..	20803b
37	1205	33.0	+10 41	8.9	8.9	Ao	1	..	38200i	87	1568	33.2	-12 30	9.8	10.3	F8	2	..	24463b
38	1422	33.0	+8 35	8.2	8.2	Ao	2	..	38168i	88	1567	33.2	-12 45	9.8	10.6	G5	2	..	24463b
39	1317	33.0	+6 24	7.9	8.9	Ko	3	..	38168i	89	1527	33.2	-21 52	9.1	9.4	K5	1	..	20535b
40	1716	33.0	-5 27	8.9	8.9	Ao	6	0,4	20803b	90	3201	33.2	-28 37	7.37	8.7	Ko	4	..	20582b
41	1717	33.0	-5 56	9.1	9.9	G5	1	..	20803b	91	3202	33.2	-32 8	7.6	8.3	G5	6	..	18385b
42	1641	33.0	-7 0	8.7	9.1	F5	5	..	20803b	92	2468	33.2	-47 54	8.5	8.9	Ko	5	..	38414b
43	1611	33.0	-10 40	10.3	10.3	Ao	2	..	24463b	93	899	33.3	+61 34	8.7	9.7	Ko	1	..	37545i
44	1564	33.0	-11 36	8.5	8.6	A2	2	..	12672b	94	1590	33.3	+42 30	9.4	10.0	Go	1	..	37397i
45	1565	33.0	-12 44	9.1	10.1	Ko	6	..	24463b	95	1196	33.3	+28 21	5.84	5.79	B8	8	..	38185i
46	1574	33.0	-13 54	9.1	9.9	G5	5	..	24463b	96	..	33.3	+22 42	var.	var.	Pec.	..	R	M
47	..	33.0	-14 10	..	..	Ao	2	..	24463b	97	1208	33.3	+10 44	8.9	8.9	Ao	1	..	38200i
48	3415	33.0	-25 56	7.8	9.6	Ko	5	5,2	24433b	98	1363	33.3	+4 44	8.35	8.16	B2	2	..	20708b
49	3197	33.0	-28 15	8.9	10.2	Ko	2	..	24433b	99	1517	33.3	+0 54	8.49	8.49	Ao	3	..	38196i
50	2978	33.0	-34 35	9.0	8.5	A2	4	..	12657b	100	1720	33.3	-5 20	9.4	10.2	G5	2	..	20803b

THE HENRY DRAPER CATALOGUE.

47400

6^h 33^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1719	33.3	- 5 48	9.1	9.4	Fo	5	..	20803b	51	1347	33.6	+13 46	7.6	8.6	Ko	3	..	38200i
2	1575	33.3	-13 34	9.4	10.4	Ko	1	..	24463b	52	1345	33.6	+ 5 17	8.5	9.9	Ma	1	..	20708b
3	1459	33.3	-15 51	8.6	8.6	Ao	5	..	39861b	53	1519	33.6	+ 0 20	8.3	9.1	G5	1	..	38196i
4	1546	33.3	-16 55	8.1	9.3	K5	3	..	39861b	54	1597	33.6	- 4 12	8.5	8.6	A5	5	..	12671b
5	3275	33.3	-29 11	9.3	9.5	Go	2	..	24433b	55	1502	33.6	- 8 4	9.2	9.2	Ao	5	..	20803b
6	2618	33.3	-42 2	8.8	8.6	Ao	3	0,3	12649b	56	1568	33.6	-11 27	9.1	9.1	Ao	5	..	24463b
7	2617	33.3	-42 35	8.5	9.6	K2	1	..	20556b	57	1579	33.6	-13 9	10.5	10.5	Ao	2	..	24463b
8	2389	33.3	-48 12	7.4	7.7	Ko	7	..	38414b	58	1580	33.6	-14 0	9.0	10.2	K5	3	..	24463b
9	1115	33.3	-53 37	8.9	9.9	Ko	1	..	20547b	59	1547	33.6	-16 37	9.8	9.9	A2	2	E	24463b
10	1116	33.3	-56 44	9.0	9.4	G5	3	R	18484b	60	1528	33.6	-21 41	9.0	9.4	F8	4	..	20535b
11	1170	33.4	+46 27	9.2	9.2	Ao	3	..	5400m	61	4240	33.6	-24 40	8.7	10.1	K2	1	..	20535b
12	1484	33.4	+41 4	6.86	7.20	F2	8	..	37397i	62	3197	33.6	-26 39	10.0	9.9	G5	1	..	24433b
13	1557	33.4	+37 51	8.0	8.5	F8	3	0,1-	38941i	63	2782	33.6	-38 4	5.96	7.2	G5	5	5,6	9042b
14	1363	33.4	+25 9	8.8	8.8	Ao	2	..	38185i	64	1006	33.7	+59 47	8.4	9.5	K2	2	..	37545i
15	1343	33.4	+24 41	6.48	6.90	F5	8	..	37441i	65	1171	33.7	+46 41	9.2	9.2	Ao	4	..	5400m
16	1425	33.4	+ 8 3	8.1	8.1	Ao	7	..	38168i	66	1591	33.7	+42 9	9.0	9.8	G5	1	..	37397i
17	1386	33.4	+ 7 0	7.4	7.2	B2	6	..	38168i	67	1676	33.7	+40 16	7.17	7.59	F5	6	..	37397i
18	1335	33.4	+ 3 30	8.7	9.3	Go	1	..	20708b	68	1338	33.7	+17 47	8.2	8.2	B9	4	..	37441i
19	1333	33.4	+ 3 1	8.3	8.3	Ao	3	..	38168i	69	1322	33.7	+ 9 45	7.8	7.7	B5	5	..	38200i
20	1691	33.4	- 2 47	6.33	7.40	K2	7	2,5	38196i	70	1445	33.7	+ 1 48	8.9	8.9	Ao	3	..	20708b
21	1595	33.4	- 4 10	9.1	9.1	Ao	3	..	12671b	71	1557	33.7	- 9 14	8.5	9.9	Ma	5	..	20803b
22	1497	33.4	- 7 14	8.6	8.6	B9	6	..	20803b	72	1549	33.7	-16 22	9.2	9.2	Ao	4	0,2	24463b
23	1515	33.4	-14 22	8.1	9.1	Ko	2	..	12672b	73	3199	33.7	-26 11	9.3	10.4	G5	3	..	24433b
24	3420	33.4	-25 4	8.60	9.0	Ao	7	..	20535b	74	3211	33.7	-28 53	10.0	9.7	A3	2	..	24433b
25	3136	33.4	-27 23	10.2	9.6	A2	3	..	24433b	75	2488	33.7	-41 28	6.25	7.9	Ko	8	..	12649b
26	2627	33.4	-45 43	9.4	9.5	A3	2	..	18483b	76	659	33.7	-60 38	9.0	9.9	Ko	3	..	15147b
27	956	33.4	-52 15	8.8	9.1	F2	4	..	20547b	77	670	33.7	-62 1	9.2	9.6	F5	3	..	15147b
28	255	33.5	+77 29	8.8	8.8	Ao	3	..	37343i	78	605	33.7	-63 50	8.1	8.1	Ao	4	..	18485b
29	1421	33.5	+22 5	8.7	8.7	Ao	2	..	37441i	79	1173	33.8	+46 6	9.2	10.2	Ko	3	..	5400m
30	1344	33.5	+ 5 47	8.3	8.3	B9	2	..	38168i	80	1558	33.8	+37 22	8.0	8.3	F2	2	0,1	38941i
31	1365	33.5	+ 4 47	6.55	6.53	B9	8	..	38196i	81	1424	33.8	+22 19	9.0	9.0	B9	3	..	37441i
32	1443	33.5	+ 1 42	6.13	5.89	Bo	7	..	38196i	82	1339	33.8	+17 35	8.5	8.5	Ao	5	..	37441i
33	1693	33.5	- 2 19	9.1	9.2	A2	2	..	38196i	83	1366	33.8	+ 4 2	8.2	8.3	A2	4	..	38168i
34	1596	33.5	- 4 50	9.1	9.9	G5	1	..	20803b	84	1446	33.8	+ 1 11	9.3	9.4	A2	1	R	20708b
35	1643	33.5	- 6 53	9.2	9.5	Fo	3	..	20803b	85	1520	33.8	+ 0 14	8.7	8.8	A3	2	..	38196i
36	1498	33.5	- 7 43	9.6	9.7	A3	2	..	20803b	86	1521	33.8	+ 0 6	8.88	8.88	Ao	2	..	38196i
37	1577	33.5	-13 22	9.1	10.1	Ko	3	..	24463b	87	1724	33.8	- 5 12	8.5	8.8	Fo	4	..	12671b
38	1516	33.5	-14 11	9.6	10.2	Go	3	..	24463b	88	1725	33.8	- 6 0	9.8	10.6	G5	1	..	20803b
39	..	33.5	-14 32	..	..	Ao	2	..	24463b	89	1648	33.8	- 6 36	10.3	10.4	A2	2	..	20803b
40	..	33.5	-15 44	..	..	A2	2	..	24463b	90	1504	33.8	- 8 36	10.1	10.1	B9	2	..	20803b
41	1564	33.5	-17 8	8.3	8.4	A2	5	0,2	39861b	91	1559	33.8	- 9 30	9.4	9.4	Ao	3	..	24463b
42	1492	33.5	-18 9	4.65	5.65	Ko	..	0,9 R	56,83	92	1558	33.8	- 9 41	9.2	10.0	G5	3	..	24463b
43	3205	33.5	-32 18	8.7	9.5	K2	1	..	18385b	93	1569	33.8	-11 41	9.8	10.4	Go	2	..	24463b
44	2781	33.5	-44 27	8.5	8.6	Ao	5	..	18483b	94	1571	33.8	-12 57	8.5	9.5	Ko	5	..	24463b
45	2782	33.5	-44 34	9.1	8.9	Ao	4	..	18483b	95	1581	33.8	-13 19	9.6	9.9	Fo	4	..	24463b
46	1020	33.5	-57 11	8.6	9.0	Ko	4	..	18484b	96	1584	33.8	-13 44	9.1	9.6	F8	5	..	24463b
47	679	33.5	-61 25	7.3	8.4	Ko	7	..	15147b	97	1461	33.8	-15 37	9.2	9.5	F2	1	..	39861b
48	677	33.5	-61 35	10.2	10.7	F8	2	..	15147b	98	3428	33.8	-25 42	9.7	9.9	G5	2	..	24433b
49	1335	33.6	+50 10	8.6	8.6	A	1	..	37419i	99	3350	33.8	-30 24	7.9	8.9	B9	2	..	18385b
50	1443	33.6	+23 24	10.0	10.1	A3	1	..	38185i	100	3031	33.8	-36 54	5.72	5.9	B9	..	0,5-	56,122

ANNALS OF HARVARD COLLEGE OBSERVATORY.

47500

6^h 33^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2552	33.8	-46 23	9.1	9.2	Fo	3	..	18483b	51	1381	34.1	+14 27	8.3	9.4	K2	1	..	38200i
2	1022	33.8	-55 55	9.1	10.2	K2	1	..	13007b	52	1355	34.1	+13 0	8.8	8.8	A	1	..	38200i
3	534	33.8	-70 14	9.6	10.0	F5	2	..	15168b	53	1211	34.1	+10 20	7.9	7.9	Ao	3	..	38200i
4	400	33.8	-76 42	9.5	10.5	Ko	2	..	20652b	54	1324	34.1	+9 51	7.80	8.08	Fo	3	..	38200i
5	256	33.9	+77 6	8.4	9.8	Mb	2	..	37343i	55	1528	34.1	-3 42	9.2	9.2	Ao	2	..	20803b
6	1464	33.9	+35 40	8.4	8.7	Fo	3	..	37527i	56	1506	34.1	-8 41	9.1	10.3	K5	2	..	20803b
7	1297	33.9	+30 16	8.2	8.3	A2	2	..	37527i	57	1561	34.1	-9 40	9.4	9.5	A2	3	..	24463b
8	1351	33.9	+12 59	8.1	9.1	Ko	3	..	38200i	58	1586	34.1	-13 3	9.1	9.9	G5	3	..	24463b
9	1389	33.9	+7 22	8.7	8.8	A2	2	..	38168i	59	1585	34.1	-13 10	8.1	9.1	Ko	2	..	12672b
10	1328	33.9	+2 26	8.8	8.8	B9	4	..	20708b	60	1553	34.1	-16 26	9.6	10.6	Ko	1	E	24463b
11	1329	33.9	+2 12	8.9	8.9	B8	3	..	20708b	61	1554	34.1	-16 47	5.93	5.93	Ao	8	1,8	8902b
12	1447	33.9	+1 11	8.7	9.7	Ko	3	5,1	12671b	62	1481	34.1	-22 40	8.7	8.8	G5	4	..	20535b
13	1505	33.9	-8 10	10.1	10.1	Ao	2	..	20803b	63	3219	34.1	-28 24	7.7	8.7	A5	6	..	20582b
14	1572	33.9	-12 35	9.6	9.6	Ao	4	..	24463b	64	3357	34.1	-30 32	7.9	8.6	A3	5	..	18385b
15	1520	33.9	-14 9	10.5	10.5	A	1	..	24463b	65	2475	34.1	-47 42	9.4	10.4	K5	2	..	38414b
16	1531	33.9	-21 21	9.6	9.4	Ao	1	..	20535b	66	1119	34.1	-56 9	7.9	8.4	Ko	7	..	18484b
17	2490	33.9	-41 10	7.6	8.7	K5	3	..	12649b	67	681	34.1	-61 5	7.4	7.7	A3	3	2,9	42927b
18	738	33.9	-58 14	10.0	10.0	Ao	2	..	13007b	68	673	34.1	-62 27	9.7	10.7	K	1	..	15147b
19	663	33.9	-60 22	9.2	10.2	Ko	2	..	13007b	69	401	34.1	-76 22	9.4	10.2	G5	2	..	20652b
20	671	33.9	-62 29	8.1	9.1	Ko	5	..	15147b	70	1051	34.2	+53 0	9.2	9.3	A2	2	..	37419i
21	260	33.9	-77 23	9.7	10.7	Ko	1	..	20652b	71	1511	34.2	+44 17	9.5	9.6	A2	1	..	5400m
22	463	34.0	+66 23	7.7	8.2	F8	7	..	37545i	72	1701	34.2	+39 20	7.38	8.38	Ko	4	..	37397i
23	..	34.0	+44 15	var.	var.	Md	1	R	5400m	73	1381	34.2	+31 12	7.7	8.7	Ko	2	..	37527i
24	1583	34.0	+43 16	9.5	10.1	G	1	..	5400m	74	1430	34.2	+19 46	7.35	8.35	Ko	6	..	37441i
25	1446	34.0	+23 46	7.8	8.2	F5	5	..	37441i	75	1356	34.2	+13 5	5.88	5.94	A2	9	..	38200i
26	1428	34.0	+19 58	9.3	9.3	A	2	..	37441i	76	1525	34.2	+0 12	8.3	8.8	F8	3	..	38196i
27	1235	34.0	+12 57	8.3	8.3	Ao	4	..	38200i	77	1566	34.2	-17 28	9.2	9.2	Ao	1	..	39861b
28	1348	34.0	+5 33	9.3	9.3	Ao	1	..	20708b	78	1495	34.2	-18 16	8.6	9.6	Ko	1	..	39861b
29	1332	34.0	+1 59	8.5	9.5	Ko	2	..	38196i	79	..	34.2	-23 29	6.61	..	Go	..	..	..
30	1523	34.0	+0 29	7.7	8.5	G5	4	..	38196i	80	4144	34.2	-23 29	6.61	7.5	A3	4	R	8902b
31	1507	34.0	-8 57	9.2	9.7	F8	3	3,2	20803b	81	3210	34.2	-26 1	8.7	9.6	Ko	4	..	24433b
32	1573	34.0	-12 14	10.1	10.6	F8	2	..	24463b	82	2635	34.2	-45 30	9.4	10.4	F8	1	..	45973b
33	3208	34.0	-26 56	9.0	9.9	Ko	2	..	24433b	83	1065	34.2	-54 50	9.1	9.3	A3	2	..	18484b
34	3145	34.0	-27 30	11.2	10.1	A2	1	..	24433b	84	261	34.2	-77 56	10.0	11.0	Ko	3	..	20652b
35	3146	34.0	-27 42	8.3	8.1	A2	6	..	12656b	85	870	34.3	+62 53	9.2	10.3	K2	1	..	37545i
36	3216	34.0	-32 15	5.27	6.9	G5	8	5,2	12657b	86	955	34.3	+58 23	8.7	9.5	G5	2	..	38239i
37	2579	34.0	-40 41	7.4	8.6	Ko	3	..	12649b	87	954	34.3	+58 6	8.8	10.0	K5	1	..	38239i
38	2631	34.0	-45 56	8.6	10.1	K5	1	..	18483b	88	1339	34.3	+50 25	8.7	9.7	Ko	1	..	37419i
39	2334	34.0	-49 8	8.5	9.1	G5	4	..	38414b	89	1338	34.3	+45 54	8.7	8.7	Ao	6	0,3	5400m
40	2300	34.0	-50 14	7.24	7.8	G5	7	..	38414b	90	1383	34.3	+33 8	7.64	7.70	A2	5	..	37527i
41	1023	34.0	-55 16	9.1	8.4	A2	6	..	18484b	91	1451	34.3	+23 44	9.0	9.4	F5	1	..	38185i
42	1022	34.0	-57 48	9.6	9.6	Ao	2	..	13007b	92	1235	34.3	+16 49	8.7	8.7	Ao	2	..	37441i
43	740	34.0	-58 7	9.1	9.4	Ao	3	..	13007b	93	1334	34.3	+2 24	8.2	8.2	B9	5	..	38196i
44	739	34.0	-59 0	8.7	9.9	K5	1	..	15176b	94	1699	34.3	-2 56	9.1	9.2	A2	2	..	20803b
45	607	34.0	-63 11	7.5	7.6	A2	4	0,8	18485b	95	1523	34.3	-14 45	8.9	9.3	F5	4	..	24463b
46	621	34.0	-66 1	9.6	9.6	Ao	2	..	18485b	96	1556	34.3	-16 10	6.90	6.90	Ao	6	0,8	8902b
47	135	34.1	+84 47	8.2	9.0	G5	5	..	37546i	97	1483	34.3	-22 57	9.1	9.1	Ao	4	R	20535b
48	1521	34.1	+20 35	8.0	9.4	Ma	1	..	37441i	98	3150	34.3	-27 15	10.2	9.7	A5	2	..	24433b
49	1429	34.1	+19 24	7.7	8.7	Ko	4	..	37441i	99	2955	34.3	-37 51	9.4	9.8	Ko	2	..	20534b
50	1271	34.1	+15 53	8.7	9.1	F5	1	..	37441i	100	2793	34.3	-38 32	7.41	7.6	B8	3	..	18558b

THE HENRY DRAPER CATALOGUE.

47600

6^h 34^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2570	34.3	-43 22	6.90	7.0	B5	7	..	18558b	51	1373	34.6	+ 4 50	8.70	8.70	A0	3	..	38168i
2	1998	34.3	-51 20	8.3	8.6	A3	7	0,7-	20547b	52	1374	34.6	+ 4 18	8.5	8.6	A5	3	..	38168i
3	677	34.3	-62 25	8.4	9.4	K0	3	..	15147b	53	1568	34.6	- 9 53	9.31	10.31	K0	2	..	24463b
4	502	34.3	-72 6	9.1	9.2	A5	4	E	20652b	54	1575	34.6	-11 59	9.2	10.0	G5	3	..	24463b
5	957	34.4	+58 23	8.7	9.0	F0	4	..	38239i	55	1570	34.6	-17 31	9.2	9.2	A0	2	..	39861b
6	1143	34.4	+56 47	8.0	8.1	A5	7	..	38239i	56	1535	34.6	-21 12	9.1	9.2	F5	1	..	20535b
7	1326	34.4	+47 53	7.54	7.60	A2	4	..	37500i	57	2639	34.6	-45 30	7.9	8.3	B9	7	..	18483b
8	1263	34.4	+11 47	7.8	7.8	B9	5	..	38200i	58	2307	34.6	-50 23	8.3	9.2	Ma	4	..	38414b
9	1350	34.4	+ 5 17	8.7	9.7	K0	1	..	20708b	59	657	34.7	+63 4	6.86	7.93	K2	7	3,6	37545i
10	1527	34.4	+ 0 40	8.3	8.3	A0	3	..	38196i	60	1340	34.7	+50 43	9.2	9.6	F5	1	..	37419i
11	1526	34.4	+ 0 37	8.9	8.9	A0	2	..	38196i	61	1239	34.7	+12 9	8.3	9.3	K0	1	..	38200i
12	1651	34.4	- 7 0	9.1	9.2	A2	3	..	20803b	62	1214	34.7	+10 32	8.3	8.3	A0	3	..	38200i
13	1564	34.4	- 9 16	8.5	8.6	A2	7	..	20803b	63	1318	34.7	- 1 17	7.4	8.4	K0	6	..	38196i
14	1570	34.4	-11 10	8.5	8.5	A0	3	..	12672b	64	1317	34.7	- 1 27	9.1	9.2	A2	2	..	12671b
15	1463	34.4	-15 52	8.5	8.5	A0	4	..	39861b	65	1655	34.7	- 7 1	9.1	9.7	Go	2	..	20803b
16	4264	34.4	-24 4	9.2	9.4	F8	2	..	20535b	66	..	34.7	-12 9	..	..	A0	2	..	24463b
17	3224	34.4	-28 57	8.3	8.7	A0	5	E	20582b	67	1525	34.7	-14 3	4.97	5.97	K0	..	0,8	56,83
18	3363	34.4	-30 24	9.5	9.5	A0	2	..	24433b	68	1498	34.7	-18 6	7.38	8.56	K5	3	..	39861b
19	3034	34.4	-36 1	7.6	8.0	F8	6	..	12657b	69	3219	34.7	-26 15	9.5	9.4	A5	3	..	24433b
20	741	34.4	-58 4	9.1	9.3	A0	2	..	13007b	70	2576	34.7	-43 6	3.18	3.13	B8	..	R	28,199
21	1007	34.5	+59 24	9.0	9.0	A0	3	..	38239i	71	2804	34.7	-44 24	7.9	8.0	A0	8	..	18483b
22	1060	34.5	+54 32	8.4	9.5	K2	2	..	37419i	72	588	34.7	-64 55	8.39	9.6	K2	3	..	18485b
23	1415	34.5	+48 44	8.8	9.9	K2	1	..	37438i	73	460	34.7	-71 34	8.1	9.1	K0	8	..	15167b
24	1174	34.5	+46 58	10.2	10.7	F8	2	..	5400m	74	232	34.7	-78 49	8.0	8.3	F0	8	..	20652b
25	1340	34.5	+45 50	8.1	8.6	F8	7	0,4	5400m	75	417	34.8	+70 51	8.6	9.1	F8	3	..	37559i
26	1339	34.5	+45 27	10.2	11.3	K2	1	..	5400m	76	996	34.8	+57 34	9.5	10.9	Ma	..	R	M
27	1513	34.5	+44 7	9.2	9.6	F5	3	..	5400m	77	1341	34.8	+44 59	10.2	11.4	K5	1	..	5400m
28	1584	34.5	+43 32	9.4	10.4	K0	1	..	5400m	78	1317	34.8	+26 46	8.2	9.3	K2	2	..	38185i
29	1300	34.5	+30 18	8.0	8.0	B9	3	..	37527i	79	1455	34.8	+23 16	8.8	8.8	B9	3	..	38185i
30	1433	34.5	+19 30	8.5	8.6	A2	3	..	37441i	80	1329	34.8	+21 2	8.5	8.5	A0	4	..	37441i
31	1363	34.5	+13 9	8.7	9.9	K5	1	..	38200i	81	1346	34.8	+17 44	7.9	8.4	F8	6	..	37441i
32	1237	34.5	+12 28	8.4	8.4	B9	4	..	38200i	82	1267	34.8	+11 18	8.1	8.1	A0	4	..	38200i
33	1334	34.5	+ 6 9	8.3	8.3	B9	5	..	38168i	83	1339	34.8	+ 2 52	9.1	9.4	F2	2	..	20708b
34	1380	34.5	- 0 44	8.7	8.7	A0	3	..	38196i	84	1340	34.8	+ 2 15	8.7	8.7	A0	3	..	38196i
35	1654	34.5	- 6 37	9.4	9.4	A0	3	..	20803b	85	1728	34.8	- 5 17	9.1	9.5	F5	2	..	20803b
36	1505	34.5	- 7 32	10.5	10.6	A3	2	..	20803b	86	1658	34.8	- 6 22	8.5	9.6	K2	3	..	20803b
37	1587	34.5	-13 57	9.6	10.4	G5	3	..	24463b	87	1659	34.8	- 6 53	9.2	9.2	A0	2	..	20803b
38	1524	34.5	-14 28	8.3	8.7	F5	3	..	12672b	88	1507	34.8	- 7 4	9.4	10.4	K0	2	..	20803b
39	1559	34.5	-16 21	8.7	9.2	F8	3	2,1	24463b	89	1508	34.8	- 7 51	9.6	9.6	A0	3	..	20803b
40	1558	34.5	-16 43	8.7	8.7	A0	4	..	39861b	90	1576	34.8	-11 57	7.9	8.9	K0	2	..	12672b
41	4265	34.5	-24 52	9.00	9.3	K2	2	..	20535b	91	1576	34.8	-12 10	10.1	10.7	Go	1	..	24463b
42	3443	34.5	-25 48	9.5	9.3	A2	3	0,1	24433b	92	1560	34.8	-16 34	8.1	8.2	A2	4	..	39861b
43	3152	34.5	-27 52	10.2	9.0	A3	2	..	12656b	93	3229	34.8	-28 29	9.3	10.1	G5	2	..	24433b
44	3226	34.5	-28 43	8.1	8.7	A3	7	..	20582b	94	2634	34.8	-42 45	8.6	9.6	K5	1	..	20556b
45	2797	34.5	-44 53	7.99	8.3	B9	7	..	18483b	95	2558	34.8	-46 48	10.2	10.4	A0	3	..	38414b
46	402	34.5	-76 7	8.7	9.7	K0	5	..	20652b	96	2487	34.8	-47 38	10.2	9.5	A2	4	..	38414b
47	995	34.6	+57 27	9.2	9.3	A3	2	..	38239i	97	2403	34.8	-49 0	9.8	10.3	Go	2	..	38414b
48	1109	34.6	+55 34	8.6	10.0	Mb	2	..	37419i	98	2002	34.8	-51 56	9.2	9.4	A0	3	..	38414b
49	1370	34.6	+32 30	8.2	9.3	K2	1	..	37527i	99	1027	34.8	-57 27	7.0	7.6	F2	10	..	18484b
50	1383	34.6	+31 26	8.0	8.8	G5	2	..	37527i	100	1008	34.9	+59 12	9.2	10.3	K2	1	..	38239i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

47700

6^h 34^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	959	34.9	+58 34	8.9	9.9	Ko	3	..	38239i	51	1353	35.1	+24 46	9.0	9.0	Ao	3	..	38185i
2	1053	34.9	+53 22	10.2	10.2	Ao	1	..	37419i	52	1357	35.1	+24 4	8.0	9.1	K2	2	..	38185i
3	1482	34.9	+36 3	6.33	6.75	F5	7	..	37527i	53	1528	35.1	+20 44	7.6	8.4	G5	5	..	37441i
4	1427	34.9	+34 57	9.12	9.12	Ao	2	..	38941i	54	1215	35.1	+10 29	8.7	8.7	B9	2	..	38200i
5	1382	34.9	+25 25	8.0	9.4	Ma	3	..	38185i	55	1332	35.1	+ 9 53	8.12	8.10	B9	2	..	38200i
6	1438	34.9	+ 8 15	8.3	8.4	A2	3	..	38168i	56	1338	35.1	+ 6 28	6.37	6.35	B9	9	..	38168i
7	1731	34.9	- 5 18	9.2	9.2	Ao	2	..	12671b	57	1357	35.1	+ 5 21	8.9	9.0	A3	2	..	20708b
8	1510	34.9	- 7 35	9.6	10.2	Go	2	..	20803b	58	1348	35.1	+ 3 38	7.8	8.9	K2	2	..	38168i
9	1509	34.9	- 7 56	9.1	9.2	A3	5	..	20803b	59	1344	35.1	+ 2 39	7.7	7.7	B9	6	..	38196i
10	1509	34.9	- 8 37	9.2	9.2	B8	4	..	20803b	60	1704	35.1	- 2 16	7.7	7.7	Ao	7	..	38196i
11	1573	34.9	- 9 45	8.9	9.9	Ko	3	..	24463b	61	1607	35.1	- 4 36	8.5	8.3	Bo	3	..	12671b
12	1626	34.9	-10 43	9.1	9.1	B9	3	..	24463b	62	1733	35.1	- 5 43	9.6	9.6	Ao	4	..	12671b
13	1624	34.9	-10 48	8.9	10.1	K5	2	..	24463b	63	1594	35.1	-13 4	9.8	10.2	F5	2	..	24463b
14	1577	34.9	-11 36	8.1	8.1	B8	6	..	12672b	64	3450	35.1	-25 54	9.2	9.3	Go	4	5,2	24433b
15	1527	34.9	-14 34	8.9	9.9	Ko	4	..	24463b	65	3230	35.1	-32 44	9.0	8.6	Ao	2	..	12657b
16	1464	34.9	-16 2	8.7	8.7	Ao	6	..	39861b	66	2597	35.1	-40 56	8.7	8.6	A3	2	..	18558b
17	1481	34.9	-21 1	9.4	8.9	Ao	2	..	20535b	67	2407	35.1	-48 23	9.6	10.0	F5	2	..	38414b
18	3158	34.9	-27 39	8.3	8.7	G5	3	..	12656b	68	2344	35.1	-49 26	7.1	7.5	A5	10	..	38414b
19	3230	34.9	-28 39	9.0	9.1	Ao	3	..	20582b	69	2345	35.1	-49 45	10.0	9.8	F5	3	..	38414b
20	2807	34.9	-44 11	8.9	8.6	F5	3	..	18483b	70	742	35.1	-58 19	8.1	7.8	Ao	4	..	15176b
21	960	34.9	-52 15	7.9	7.8	Ao	5	..	10697b	71	331	35.2	+72 50	8.6	8.9	Fo	2	..	37343i
22	504	34.9	-72 26	9.9	10.0	A2	3	..	20652b	72	1063	35.2	+54 6	9.2	10.0	G5	1	..	37419i
23	262	34.9	-77 7	9.9	9.9	Ao	4	..	20652b	73	1372	35.2	+32 44	7.67	8.09	F5	4	..	37527i
24	91	35.0	+86 28	9.2	9.2	A	2	..	37546i	74	1354	35.2	+24 11	8.6	8.6	Ao	2	..	38185i
25	363	35.0	+71 28	8.8	10.2	Ma	2	..	37559i	75	1435	35.2	+19 52	8.85	8.91	A2	2	..	37441i
26	1110	35.0	+55 38	8.0	8.8	G5	4	..	37419i	76	1239	35.2	+16 37	8.9	9.3	F5	2	..	37441i
27	1054	35.0	+53 0	8.6	9.6	Ko	2	..	37419i	77	1334	35.2	+ 9 45	7.9	7.7	B2	4	..	38200i
28	1514	35.0	+44 17	10.2	11.2	Ko	1	..	5400m	78	1454	35.2	+ 1 25	9.3	9.3	B9	3	..	20708b
29	1586	35.0	+43 41	10.2	11.0	G5	1	..	5400m	79	1609	35.2	- 4 30	9.1	9.2	A2	3	..	12671b
30	1307	35.0	+29 49	7.36	8.36	Ko	3	..	37527i	80	1735	35.2	- 5 12	8.00	8.00	Ao	6	..	12671b
31	1207	35.0	+28 18	6.54	7.54	Ko	5	0,3	38185i	81	1578	35.2	-11 14	9.1	10.1	Ko	4	..	24463b
32	1331	35.0	+ 9 55	7.79	7.74	B8	3	..	38200i	82	1578	35.2	-12 10	10.1	10.1	Ao	2	..	24463b
33	1356	35.0	+ 5 0	9.01	9.07	A2	2	..	38168i	83	1529	35.2	-14 22	8.5	9.5	Ko	4	..	24463b
34	1343	35.0	+ 2 37	8.9	8.9	Ao	2	..	20708b	84	1538	35.2	-21 42	8.4	8.2	B9	7	..	20535b
35	1382	35.0	- 0 14	9.6	9.7	A5	1	..	38196i	85	4168	35.2	-23 43	9.0	8.9	Go	2	..	20535b
36	1320	35.0	- 1 38	8.9	8.9	A	2	..	38196i	86	3230	35.2	-26 17	10.2	10.9	Ma	1	..	24433b
37	1628	35.0	-10 30	9.4	9.4	B9	5	..	24463b	87	3231	35.2	-26 28	8.9	9.0	G5	2	..	12656b
38	1574	35.0	-17 27	9.1	9.2	A5	3	..	39861b	88	3314	35.2	-29 4	8.02	8.6	Ko	4	..	20582b
39	4165	35.0	-23 5	9.5	9.4	Go	1	..	20535b	89	3514	35.2	-31 19	8.7	9.2	Ao	1	..	18385b
40	4273	35.0	-24 15	9.2	9.1	Ao	3	..	20535b	90	2725	35.2	-39 24	9.4	9.9	K2	1	..	20534b
41	4274	35.0	-24 49	8.9	9.9	K2	2	..	24433b	91	2490	35.2	-47 40	9.8	9.9	F5	2	..	38414b
42	3227	35.0	-26 53	9.5	9.7	Ko	2	..	24433b	92	1123	35.2	-56 10	9.0	9.6	F2	3	..	13007b
43	3160	35.0	-27 2	7.9	8.7	A3	5	..	12656b	93	263	35.2	-77 33	9.8	10.4	Go	3	..	20652b
44	3375	35.0	-30 24	9.5	9.2	Ao	4	..	24433b	94	1175	35.3	+46 52	9.5	10.1	Go	3	..	5400m
45	1028	35.0	-57 2	9.6	9.6	Ao	2	..	18484b	95	1304	35.3	+18 40	8.4	8.5	A5	2	..	37441i
46	220	35.0	-79 43	9.4	10.6	K5	2	..	20652b	96	1350	35.3	+ 3 35	9.3	9.4	A2	1	..	38168i
47	1061	35.1	+54 13	7.88	8.22	F2	5	..	37419i	97	1706	35.3	- 2 55	8.5	8.6	A2	4	0,3	12671b
48	1328	35.1	+47 51	7.27	7.69	F5	5	..	37500i	98	1537	35.3	- 3 16	8.1	8.1	Ao	4	..	38196i
49	1428	35.1	+34 8	8.6	8.6	Ao	2	..	37527i	99	1610	35.3	- 4 22	7.5	8.7	K5	4	..	12671b
50	1309	35.1	+29 4	8.4	8.4	Ao	2	..	37527i	100	1611	35.3	- 4 37	9.1	9.1	B9	2	..	12671b

THE HENRY DRAPER CATALOGUE.

47800

6^h 35^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1510	35.3	- 8 24	8.7	9.8	K2	3	..	20803b	51	3520	35.5	-31 45	7.8	6.9	B3	6	1,7-	12656b
2	1631	35.3	-10 14	8.4	8.4	B9	4	..	12672b	52	3047	35.5	-35 3	8.02	8.6	G5	4	..	12657b
3	1579	35.3	-12 56	10.7	10.8	A2	1	..	24463b	53	2495	35.5	-47 4	8.6	8.6	F2	5	0,3	38414b
4	1488	35.3	-23 1	10.3	9.7	A0	1	..	20535b	54	2412	35.5	-48 2	9.4	9.4	F0	5	..	38414b
5	2970	35.3	-37 54	6.98	7.0	A2	4	4,8	18558b	55	589	35.5	-64 47	8.14	8.6	F2	5	..	18485b
6	2647	35.3	-45 11	8.5	8.9	F2	4	..	18483b	56	628	35.5	-67 8	8.3	9.5	K5	4	..	18485b
7	677	35.3	-59 8	8.5	9.0	F0	3	..	15176b	57	540	35.5	-68 28	9.1	9.1	A0	4	..	18485b
8	684	35.3	-61 30	9.1	9.6	Go	4	..	15147b	58	392	35.5	-74 50	10.1	10.4	F0	2	..	20652b
9	537	35.3	-70 55	8.7	9.5	G5	4	..	15167b	59	234	35.5	-78 44	10.0	10.3	F0	6	..	20652b
10	1343	35.4	+50 10	8.6	8.7	A2	2	..	37419i	60	960	35.6	+58 2	9.2	9.3	A2	1	..	38239i
11	..	35.4	+45 26	..	..	G5	1	..	5400m	61	1177	35.6	+46 16	9.7	9.8	A2	3	..	5400m
12	1303	35.4	+30 47	8.0	8.4	F5	3	..	37527i	62	1565	35.6	+37 12	7.8	8.6	G5	3	E	37527i
13	1531	35.4	+20 4	8.20	8.20	A0	5	..	37441i	63	1242	35.6	+16 30	6.18	6.18	A0	8	..	37441i
14	1438	35.4	+19 30	9.1	9.6	F8	2	..	37441i	64	1544	35.6	- 3 58	9.1	9.7	Go	2	..	20803b
15	1359	35.4	+ 5 53	9.3	9.3	B9	2	..	20708b	65	1665	35.6	- 6 6	9.2	9.3	A2	4	..	20803b
16	1381	35.4	+ 4 35	8.7	9.7	K0	1	..	20708b	66	1580	35.6	-12 34	9.1	9.6	F8	6	0,2-	24463b
17	1352	35.4	+ 3 28	8.1	9.1	K0	1	..	38168i	67	1600	35.6	-13 25	10.1	10.1	A0	2	..	24463b
18	1455	35.4	+ 1 2	8.79	9.57	G5	1	..	38196i	68	1578	35.6	-17 12	7.7	8.0	F0	6	0,5	39861b
19	1540	35.4	- 3 44	9.4	9.4	B9	4	..	20803b	69	4292	35.6	-24 47	9.2	9.7	K0	3	..	24433b
20	1613	35.4	- 4 54	9.4	9.4	A0	2	..	20803b	70	3238	35.6	-26 35	8.3	8.4	A5	4	..	12656b
21	1664	35.4	- 6 15	7.18	8.53	Ma	6	0,8	12671b	71	3250	35.6	-28 57	8.5	8.7	A2	6	..	20582b
22	1632	35.4	-10 7	9.2	9.8	Go	2	..	24463b	72	2650	35.6	-45 17	8.2	8.6	A0	6	..	18483b
23	1581	35.4	-11 29	9.6	9.9	F2	3	..	24463b	73	2565	35.6	-46 53	10.0	11.0	Ma	1	..	38414b
24	1596	35.4	-13 52	8.7	8.7	A0	4	..	24340b	74	2496	35.6	-47 31	9.2	9.5	F0	5	..	38414b
25	1532	35.4	-14 39	8.9	8.9	A0	3	..	12672b	75	634	35.6	-69 48	9.1	9.7	Go	2	..	15168b
26	1540	35.4	-21 14	8.60	8.8	F0	4	..	20535b	76	446	35.7	+67 20	9.2	9.7	F8	1	..	38155i
27	4172	35.4	-23 36	5.91	5.9	A0	7	0,8	8902b	77	903	35.7	+61 21	9.2	9.8	Go	1	..	37545i
28	3237	35.4	-26 19	8.5	9.3	K0	4	2,2	24433b	78	1116	35.7	+52 14	9.0	9.3	F0	2	..	37419i
29	3046	35.4	-35 25	9.4	9.0	A0	3	..	12657b	79	1534	35.7	+49 30	7.72	8.72	K0	4	..	37500i
30	1031	35.4	-57 51	9.7	9.7	A	2	..	13007b	80	1331	35.7	+47 0	9.4	10.4	K0	3	..	5400m
31	389	35.4	-73 40	8.4	8.5	A5	10	..	20652b	81	1516	35.7	+44 45	8.7	9.7	K0	2	..	5400m
32	46	35.5	+87 32	8.6	9.4	G5	2	..	37546i	82	1713	35.7	+39 0	6.96	7.30	F2	7	..	37397i
33	418	35.5	+70 38	9.0	9.4	F5	2	..	37559i	83	1388	35.7	+31 33	var.	var.	Na	..	R	M
34	1711	35.5	+39 8	8.1	8.2	A2	3	..	37397i	84	1309	35.7	+18 48	8.3	8.4	A2	2	..	37441i
35	1195	35.5	+27 32	8.6	8.6	A0	3	..	38185i	85	1281	35.7	+15 31	7.5	7.6	A5	3	..	38200i
36	1194	35.5	+27 11	7.68	8.68	K0	4	..	38185i	86	1273	35.7	+11 6	6.43	7.78	Ma	5	..	38200i
37	1439	35.5	+19 2	8.7	9.5	G5	1	..	37441i	87	1344	35.7	+ 9 34	7.02	6.85	B3	5	..	38200i
38	1221	35.5	+10 35	8.5	8.5	A0	2	..	38200i	88	1345	35.7	+ 9 5	6.65	7.07	F5	6	..	38168i
39	1220	35.5	+ 9 59	4.68	..	Oe5	..	R	4470b	89	1362	35.7	+ 5 48	8.9	8.9	A0	2	..	38168i
40	1542	35.5	- 3 25	8.7	9.1	F5	2	..	38196i	90	1383	35.7	+ 4 34	8.7	8.8	A2	2	..	38168i
41	1511	35.5	- 8 16	9.1	9.9	G5	3	..	20803b	91	1347	35.7	+ 2 21	9.1	9.1	B8	3	..	20708b
42	1512	35.5	- 8 57	9.2	10.2	K0	1	..	20803b	92	1542	35.7	+ 0 14	8.5	8.5	A0	3	..	38196i
43	1633	35.5	-10 32	9.4	10.4	K0	1	..	24463b	93	1388	35.7	- 0 40	9.6	9.6	A0	2	..	20708b
44	1634	35.5	-10 50	9.8	10.4	Go	2	..	24463b	94	1546	35.7	- 3 49	9.2	9.2	A0	2	..	20803b
45	..	35.5	-11 35	..	..	A0	3	..	24463b	95	1615	35.7	- 4 30	9.4	9.4	A0	2	..	12671b
46	1598	35.5	-13 13	9.2	10.2	K0	2	..	24463b	96	1739	35.7	- 5 56	9.6	9.9	F	2	..	20803b
47	1599	35.5	-13 18	10.5	10.8	F0	1	..	24463b	97	1516	35.7	- 7 19	8.3	8.3	A0	7	..	20803b
48	1597	35.5	-13 58	9.1	9.2	A5	3	..	24340b	98	1515	35.7	- 8 51	8.9	8.9	B9	5	..	24463b
49	4291	35.5	-24 42	9.3	9.7	K0	2	..	24433b	99	1514	35.7	- 8 52	8.7	8.7	B9	4	..	24463b
50	3246	35.5	-28 21	7.7	9.4	Ma	2	..	20582b	100	1635	35.7	-10 48	9.4	9.4	B9	4	..	24463b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

47900

6^h 35^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1583	35.7	-12 1	9.1	9.9	G5	2	..	24340b	51	1032	35.9	-57 21	8.5	9.7	Ko	2	..	13007b
2	1518	35.7	-19 4	8.5	8.8	A2	3	..	18975b	52	744	35.9	-58 5	8.0	8.1	Fo	4	..	15176b
3	1491	35.7	-22 49	8.3	8.8	K5	3	..	20535b	53	508	35.9	-72 11	8.5	8.6	A2	6	E	20652b
4	4178	35.7	-23 36	9.3	7.6	B8	7	..	20535b	54	1140	36.0	+55 58	8.4	8.9	F8	3	..	38239i
5	3321	35.7	-29 56	7.8	11.0	K5	2	..	24433b	55	1346	36.0	+50 15	8.2	9.0	G5	2	..	37419i
6	3049	35.7	-35 27	8.4	8.3	Fo	5	..	12657b	56	1588	36.0	+43 21	9.7	10.5	G5	1	..	5400m
7	2974	35.7	-37 26	7.9	8.9	Ko	4	..	12657b	57	1714	36.0	+39 23	8.7	8.8	A2	2	..	38941i
8	2600	35.7	-40 30	8.0	8.4	F8	4	..	12649b	58	1485	36.0	+36 43	9.0	10.0	Ko	1	..	38941i
9	2497	35.7	-47 17	9.1	9.5	Ko	3	0,1	38414b	59	1434	36.0	+34 12	7.8	7.8	B9	4	..	37527i
10	1028	35.7	-55 15	6.88	7.3	Ko	9	..	18484b	60	1392	36.0	+25 34	7.8	9.2	Ma	2	..	38185i
11	635	35.7	-69 41	9.4	9.7	F2	2	..	15168b	61	1350	36.0	+ 9 57	7.27	7.15	B5	4	..	38200i
12	1000	35.8	+57 12	8.7	8.8	A2	4	..	38239i	62	1388	36.0	+ 4 15	8.2	8.8	Go	4	..	38168i
13	1517	35.8	+44 56	9.32	9.82	F8	2	..	5400m	63	1458	36.0	+ 1 16	8.5	9.5	Ko	3	..	20708b
14	1518	35.8	+44 38	5.17	6.35	K5	9	R	37500i	64	1546	36.0	+ 0 36	5.64	5.62	B9	10	..	38196i
15	1339	35.8	+21 17	9.0	9.0	Ao	1	..	37441i	65	1616	36.0	- 4 28	8.9	9.2	Fo	3	..	12671b
16	1352	35.8	+17 50	8.1	8.1	B9	6	..	37441i	66	1744	36.0	- 5 26	8.9	9.9	Ko	1	..	12671b
17	1516	35.8	- 8 52	9.4	9.5	A2	4	..	24463b	67	1519	36.0	- 7 6	8.7	8.7	B9	4	..	20803b
18	1636	35.8	-10 56	10.5	10.5	A	1	..	24463b	68	1638	36.0	-10 44	8.7	9.0	Fo	6	..	24463b
19	1581	35.8	-12 50	9.4	10.6	K5	2	..	24463b	69	1469	36.0	-15 54	8.5	9.6	K2	3	0,2	24463b
20	1563	35.8	-16 23	8.7	9.8	K2	1	..	39861b	70	3249	36.0	-26 54	10.9	10.2	A	1	..	24433b
21	3245	35.8	-26 6	9.7	9.3	Ao	4	0,2	24433b	71	3328	36.0	-29 7	9.7	9.8	F8	3	..	24433b
22	2508	35.8	-41 26	9.4	9.5	Ao	2	..	20556b	72	3388	36.0	-30 4	10.00	9.9	F	2	..	24433b
23	2587	35.8	-43 44	7.9	7.7	Ao	4	0,8	18558b	73	2417	36.0	-48 8	5.00	6.1	Ko	..	R	28,199
24	2817	35.8	-44 58	7.5	7.7	B8	9	R	18483b	74	681	36.0	-62 15	8.5	8.8	F2	4	..	15147b
25	2570	35.8	-46 5	8.2	8.6	Ao	7	..	18483b	75	630	36.0	-67 41	9.3	9.4	A2	3	..	18485b
26	2353	35.8	-49 47	9.8	10.0	A2	2	..	38414b	76	98	36.1	+85 42	8.7	10.1	Ma	3	..	37546i
27	2314	35.8	-50 18	9.4	10.6	Ko	2	..	38414b	77	1013	36.1	+59 35	8.1	8.5	F5	7	E	37526i
28	1012	35.9	+59 57	8.86	9.64	G5	2	..	38239i	78	962	36.1	+58 19	8.6	9.7	K2	2	..	38239i
29	961a	35.9	+58 0	var.	var.	Md	..	R	56,200	79	1056	36.1	+53 24	6.38	7.38	Ko	7	..	37419i
30	1001	35.9	+57 1	7.15	8.50	Ma	4	..	38239i	80	1178	36.1	+46 14	9.9	11.1	K5	1	..	5400m
31	1687	35.9	+40 13	8.1	8.5	F5	3	..	37397i	81	1377	36.1	+32 35	8.8	8.8	Ao	3	..	37527i
32	1390	35.9	+25 55	9.5	9.5	Ao	2	..	38185i	82	1389	36.1	+31 55	8.2	8.2	B9	3	..	37527i
33	1274	35.9	+11 30	8.5	8.5	A	1	..	38200i	83	1275	36.1	+11 0	8.2	9.2	Ko	2	..	38200i
34	1349	35.9	+ 9 50	8.72	8.70	B9	2	..	38200i	84	1346	36.1	+ 6 13	6.83	6.83	Ao	7	..	38168i
35	1392	35.9	- 0 43	8.9	9.0	A2	2	..	38196i	85	1391	36.1	+ 4 7	8.8	8.8	B9	2	..	20708b
36	1743	35.9	- 5 44	9.2	9.2	Ao	3	0,2	12671b	86	1711	36.1	- 2 49	9.2	10.2	Ko	2	..	20867b
37	1667	35.9	- 6 37	10.1	10.2	A2	1	..	20803b	87	1668	36.1	- 6 49	9.8	9.8	B9	2	..	20803b
38	1518	35.9	- 7 47	9.6	9.6	Ao	3	..	20803b	88	1520	36.1	- 7 43	9.8	9.9	A3	2	..	20803b
39	1517	35.9	- 8 55	9.2	10.4	K5	1	..	24463b	89	1518	36.1	- 8 42	8.5	8.6	A2	3	..	12672b
40	1467	35.9	-15 46	8.5	8.6	A3	4	..	39861b	90	1604	36.1	-13 11	8.5	9.5	Ko	2	..	24340b
41	1564	35.9	-16 48	9.2	9.8	Go	1	..	39861b	91	1603	36.1	-13 27	10.3	10.4	A2	2	..	24463b
42	1504	35.9	-19 0	7.9	8.0	A2	5	..	18975b	92	1490	36.1	-20 58	8.5	9.4	Ko	1	..	20535b
43	4185	35.9	-23 44	9.0	8.3	Ao	5	..	20535b	93	1547	36.1	-21 18	7.51	7.6	A3	4	2,9	8902b
44	3248	35.9	-26 41	8.9	8.1	Ao	5	..	12656b	94	4190	36.1	-23 12	8.5	9.4	Ko	2	..	20535b
45	3255	35.9	-28 35	9.5	9.6	A5	3	..	24433b	95	3469	36.1	-25 24	9.3	9.7	Go	2	..	24433b
46	3386	35.9	-30 22	5.78	7.5	Ko	10	..	18385b	96	3467	36.1	-25 32	9.0	9.7	G5	2	..	24433b
47	3050	35.9	-35 55	8.4	8.6	F2	5	..	12657b	97	3253	36.1	-26 39	9.7	9.4	Go	3	..	24433b
48	2977	35.9	-37 2	8.7	8.9	Ko	2	..	12657b	98	3179	36.1	-27 41	8.7	9.6	K5	3	..	24433b
49	2571	35.9	-46 25	9.4	10.6	Ko	2	..	38414b	99	2979	36.1	-37 32	9.0	8.6	B8	4	..	12657b
50	2499	35.9	-47 39	9.1	9.5	Ko	3	..	38414b	100	2740	36.1	-39 26	8.0	9.2	Ko	1	..	12657b

THE HENRY DRAPER CATALOGUE.

48000

6^h 36^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2501	36.1	-47 13	9.6	9.8	F5	3	5,1	38414b	51	1521	36.4	+44 37	9.0	9.0	Ao	4	..	5400m
2	2420	36.1	-48 37	7.9	7.7	A2	8	..	38414b	52	1520	36.4	+44 31	8.5	9.0	F8	4	3,3	5400m
3	592	36.1	-64 36	8.3	9.3	Ko	3	..	18485b	53	1690	36.4	+40 4	8.87	9.29	F5	1	..	38941i
4	1229	36.2	+51 34	7.53	7.53	Ao	7	..	37419i	54	1435	36.4	+34 13	7.9	7.9	B9	5	..	37527i
5	1486	36.2	+36 16	8.6	8.7	A2	2	..	38941i	55	1356	36.4	+9 37	9.1	9.1	B9	2	..	38200i
6	1378	36.2	+32 40	6.87	7.65	G5	4	..	37527i	56	1716	36.4	-2 14	7.9	8.4	F8	7	0,3	12671b
7	1320	36.2	+29 28	7.46	7.44	B9	5	..	37527i	57	1748	36.4	-5 47	9.1	9.1	B8	2	..	20803b
8	1393	36.2	+25 28	9.0	9.6	Go	1	..	38185i	58	1675	36.4	-6 33	9.1	10.3	K5	2	..	20803b
9	1248	36.2	+16 52	8.5	9.3	G5	1	..	37441i	59	1677	36.4	-6 58	9.8	10.1	Fo	3	..	20803b
10	1394	36.2	+14 31	7.64	7.92	Fo	4	..	38200i	60	1524	36.4	-7 54	8.1	8.1	B9	9	R	20803b
11	1395	36.2	+14 19	6.81	6.87	A2	8	..	38200i	61	1524	36.4	-7 54	8.1	8.1	B9	9	R	20803b
12	1228	36.2	+10 8	8.52	8.52	A	2	..	38200i	62	1592	36.4	-9 20	9.6	9.6	A	2	..	24463b
13	1747	36.2	-5 36	7.5	8.5	Ko	7	..	12671b	63	1586	36.4	-11 14	9.4	10.4	Ko	2	..	24463b
14	1672	36.2	-6 24	9.8	9.9	A2	3	..	20803b	64	1605	36.4	-13 15	9.6	9.6	Ao	3	..	24463b
15	1669	36.2	-6 55	9.4	10.2	G5	3	..	20803b	65	1537	36.4	-14 51	9.4	9.5	A2	4	..	24463b
16	1523	36.2	-7 28	7.10	8.17	K2	8	..	20803b	66	3260	36.4	-26 12	8.1	8.7	F5	6	3,4	20582b
17	1641	36.2	-10 2	8.81	8.89	A3	6	..	24463b	67	3185	36.4	-27 11	11.4	10.1	K2	1	..	24433b
18	1640	36.2	-10 28	9.4	10.2	G5	3	..	24463b	68	2983	36.4	-37 38	9.8	8.9	B9	3	..	12657b
19	1583	36.2	-12 56	9.4	9.4	Ao	3	..	24463b	69	2592	36.4	-43 20	7.3	8.6	K5	5	..	20556b
20	4305	36.2	-24 47	9.2	9.3	Go	3	..	20535b	70	683	36.4	-62 50	9.1	9.9	G5	2	..	15147b
21	3255	36.2	-26 2	10.0	9.7	A5	2	..	24433b	71	1588a	36.5	+43 8	8.7	9.8	K2	5	2,1	5400m
22	3331	36.2	-29 40	9.2	9.8	Fo	3	..	24433b	72	1491	36.5	+41 23	8.6	8.6	Ao	2	..	38941i
23	2355	36.2	-49 14	10.0	9.7	Fo	4	..	38414b	73	1567	36.5	+37 15	6.24	7.24	Ko	7	5,7	38941i
24	966	36.2	-52 50	7.1	7.8	K5	5	E	13007b	74	1472	36.5	+35 39	9.1	9.7	Go	1	..	38941i
25	685	36.2	-61 27	8.7	10.5	K5	2	..	15147b	75	1445	36.5	+22 14	9.5	9.9	F5	1	..	38185i
26	419	36.3	+70 20	8.34	9.34	Ko	3	..	38169i	76	1536	36.5	+20 49	8.8	8.9	A3	2	..	37441i
27	..	36.3	+46 52	..	..	G5	1	..	5400m	77	1398	36.5	+4 48	9.3	9.4	A2	2	..	38168i
28	1519	36.3	+44 50	9.37	10.37	Ko	1	..	5400m	78	1397	36.5	+4 30	9.1	9.1	Ao	2	..	20708b
29	1313	36.3	+18 53	8.2	8.2	B8	3	R	37441i	79	1395	36.5	-1 0	8.8	9.3	F8	1	..	38196i
30	1366	36.3	+5 3	8.11	8.17	A2	3	..	38168i	80	1553	36.5	-3 53	8.1	8.2	A2	3	..	38196i
31	1396	36.3	+4 35	8.8	9.1	F2	2	..	20708b	81	1525	36.5	-7 49	9.2	9.2	B9	2	..	20803b
32	1395	36.3	+4 20	8.9	8.9	Ao	2	..	38168i	82	..	36.5	-8 39	..	..	Ao	1	..	24746b
33	1353	36.3	+2 24	8.9	8.9	Ao	3	..	38196i	83	1538	36.5	-14 40	10.2	10.2	Ao	2	..	24463b
34	1354	36.3	+2 9	8.9	8.9	Ao	2	..	38196i	84	1569	36.5	-16 9	10.1	10.1	Ao	2	E	24463b
35	1465	36.3	+1 3	7.49	7.49	Ao	6	..	38196i	85	1582	36.5	-17 41	8.4	9.4	Ko	1	..	18975b
36	1642	36.3	-10 16	9.1	10.1	Ko	2	..	24463b	86	3189	36.5	-27 16	10.7	9.9	Ko	1	..	24433b
37	1585	36.3	-11 45	10.1	10.4	Fo	2	..	24463b	87	2817	36.5	-38 4	6.54	7.9	Ko	7	..	12657b
38	1585	36.3	-12 5	6.78	6.61	B3	9	..	24340b	88	2818	36.5	-38 41	8.7	9.6	A	3	E	20534b
39	1584	36.3	-12 32	9.8	9.9	A5	3	..	24463b	89	2748	36.5	-39 19	8.7	9.2	Ao	2	..	12657b
40	1535	36.3	-14 27	9.6	10.6	Ko	1	..	24463b	90	125	36.5	-83 8	8.5	9.5	Ko	3	..	20557b
41	1473	36.3	-15 3	9.2	9.3	A2	3	..	24463b	91	1115	36.6	+55 40	8.1	9.1	Ko	4	..	37419i
42	4194	36.3	-23 5	10.0	8.9	A2	2	..	20535b	92	1118	36.6	+52 51	8.5	9.6	K2	1	..	37419i
43	3257	36.3	-32 39	10.0	8.9	Ao	4	..	18385b	93	1179	36.6	+46 4	10.2	10.3	A3	1	..	5400m
44	3256	36.3	-32 48	8.7	8.0	B9	6	0,3	12657b	94	1522	36.6	+44 4	8.5	8.6	A5	4	0,1	5400m
45	2744	36.3	-39 57	8.75	9.2	G5	1	..	12657b	95	1490	36.6	+36 26	8.6	8.7	A3	2	..	37527i
46	1126	36.3	-53 33	8.3	8.4	A5	5	..	13007b	96	1446	36.6	+22 35	9.8	10.2	F5	1	..	38185i
47	540	36.3	-70 36	9.1	9.7	Go	3	..	15168b	97	1357	36.6	+17 45	5.14	5.14	Ao	..	0,10	56,83
48	347	36.4	+73 43	8.6	9.0	F5	2	..	37343i	98	1407	36.6	+7 35	8.2	9.0	G5	3	..	38168i
49	389	36.4	+69 44	8.12	8.12	Ao	4	..	37559i	99	1351	36.6	+6 27	6.20	6.01	B2	8	..	38168i
50	874	36.4	+62 44	7.8	7.8	B8	7	..	37545i	100	1399	36.6	+4 14	8.7	8.8	A5	2	..	38168i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

48100

6^h 36^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1356	36.6	+ 2 41	7.4	8.4	Ko	4	..	38196i	51	2660	36.8	- 45 28	8.6	9.2	K2	2	..	18483b
2	1466	36.6	+ 1 36	8.9	8.9	Ao	2	..	38196i	52	2362	36.8	- 49 35	9.6	9.4	G5	4	..	38414b
3	1335	36.6	- 1 48	8.7	9.1	F5	2	..	38196i	53	2320	36.8	- 50 50	8.2	8.8	A5	5	..	38414b
4	1720	36.6	- 3 1	9.4	10.2	G5	1	..	38196i	54	2319	36.8	- 51 1	8.5	9.1	G5	2	..	10697b
5	1679	36.6	- 6 3	8.5	8.5	Ao	6	0,8	12671b	55	1128	36.8	- 56 45	9.6	9.6	Ao	4	..	13007b
6	1526	36.6	- 7 4	6.84	6.79	B8	10	..	20803b	56	1589	36.9	+ 43 47	9.0	9.1	A5	2	3,4	37438i
7	1593	36.6	- 9 18	9.8	10.6	G5	1	..	24463b	57	1359	36.9	+ 3 21	6.99	7.05	A2	6	..	37652i
8	1588	36.6	- 11 30	9.1	9.2	A3	4	..	24340b	58	1682	36.9	- 6 3	8.26	9.61	Ma	4	5,1	20803b
9	1587	36.6	- 11 51	10.5	11.7	K5	1	..	24463b	59	1530	36.9	- 7 52	8.5	8.5	B9	7	..	20803b
10	3192	36.6	- 27 16	10.2	9.7	Ko	2	..	24433b	60	1521	36.9	- 8 26	9.6	9.6	Ao	2	..	20803b
11	3191	36.6	- 27 55	11.2	9.7	F8	2	..	24433b	61	1589	36.9	- 12 30	9.8	10.1	Fo	2	..	24463b
12	3270	36.6	- 28 10	7.19	8.1	G5	8	..	20582b	62	1588	36.9	- 12 50	8.5	8.5	B9	5	..	24340b
13	3065	36.6	- 36 52	8.1	8.9	Ko	3	..	12657b	63	1587	36.9	- 13 0	8.9	10.1	K5	1	..	24340b
14	2505	36.6	- 47 52	9.2	8.6	B9	4	..	38414b	64	1609	36.9	- 13 50	7.9	7.9	Ao	7	..	24340b
15	681	36.6	- 59 41	8.5	8.8	G5	3	..	15176b	65	3278	36.9	- 28 46	7.9	7.7	Ao	8	..	20582b
16	684	36.6	- 62 27	10.1	10.2	A3	2	..	15147b	66	3026	36.9	- 34 7	7.6	8.0	A2	7	1,3	12657b
17	221	36.6	- 79 52	9.8	10.3	F8	3	..	20652b	67	2611	36.9	- 40 40	8.4	8.6	A3	3	1,3	12649b
18	1346	36.7	+ 45 28	9.4	10.2	G5	3	..	5400m	68	2587	36.9	- 46 33	10.0	9.8	F8	3	..	38414b
19	1202	36.7	+ 27 12	10.0	10.0	A	1	..	38185i	69	2322	36.9	- 50 19	9.6	9.4	Ao	5	..	38414b
20	1332	36.7	+ 26 31	9.4	9.4	Ao	2	..	38185i	70	746	36.9	- 58 15	8.0	8.4	F5	3	..	15176b
21	1252	36.7	+ 16 49	8.8	9.2	F5	3	..	37441i	71	595	36.9	- 64 57	8.79	9.9	K2	1	..	18485b
22	1248	36.7	+ 12 7	8.3	9.1	G5	2	..	38200i	72	1347	37.0	+ 45 19	9.9	10.7	G5	1	..	5400m
23	1278	36.7	+ 11 36	8.5	9.3	G5	1	..	38200i	73	1590	37.0	+ 43 10	9.0	9.0	Ao	5	0,2	5400m
24	1619	36.7	- 4 12	9.8	9.8	Ao	3	..	20803b	74	1439	37.0	+ 34 25	9.0	9.1	A5	2	..	37527i
25	1596	36.7	- 9 24	9.8	9.8	Ao	2	..	24463b	75	1204	37.0	+ 27 2	8.7	9.3	Go	1	..	38185i
26	1646	36.7	- 10 55	9.6	9.7	A5	4	..	24463b	76	1369	37.0	+ 24 14	9.0	9.1	A2	1	..	38185i
27	1590	36.7	- 11 12	8.3	8.3	Ao	7	..	24340b	77	1348	37.0	+ 21 42	9.5	9.5	B8	2	..	37441i
28	1606	36.7	- 13 42	8.5	9.7	K5	2	..	24340b	78	1357	37.0	+ 2 34	8.3	9.1	G5	1	..	38196i
29	1550	36.7	- 21 2	9.6	9.2	Ao	2	..	20535b	79	1599	37.0	- 10 0	9.81	9.81	Ao	4	..	24463b
30	4316	36.7	- 24 46	9.0	9.7	K5	1	..	20535b	80	1591	37.0	- 11 10	10.5	10.5	Ao	1	..	24463b
31	3266	36.7	- 26 3	10.2	9.7	Go	2	..	24433b	81	1590	37.0	- 12 8	10.1	11.1	Ko	1	..	24463b
32	3273	36.7	- 28 33	9.5	10.1	Ko	2	..	24433b	82	1553	37.0	- 21 6	9.1	9.4	G5	1	..	20535b
33	3340	36.7	- 29 39	9.0	10.1	Ko	2	..	24433b	83	4320	37.0	- 24 26	9.7	9.9	K5	2	..	24433b
34	2750	36.7	- 39 23	9.0	9.2	Ao	2	..	12657b	84	4321	37.0	- 24 43	9.3	9.3	A2	3	..	20535b
35	674	36.7	- 60 1	9.72	9.1	F5	1	..	15176b	85	3479	37.0	- 25 49	8.1	8.5	A2	6	2,7	12656b
36	638	36.7	- 70 0	9.09	8.2	A3	5	..	15168b	86	3268	37.0	- 32 41	8.1	8.3	Ko	3	..	12657b
37	468	36.7	- 71 53	9.0	10.0	Ko	5	..	15167b	87	3071	37.0	- 36 2	8.4	9.2	K2	3	..	20534b
38	509	36.7	- 72 39	9.3	10.5	K5	1	..	15167b	88	1031	37.0	- 55 12	8.5	9.3	G5	2	..	13007b
39	393	36.7	- 74 37	9.7	10.5	G5	2	..	20652b	89	688	37.0	- 61 26	6.26	7.1	Go	6	..	42927b
40	1002	36.8	+ 57 36	9.2	9.2	B9	4	..	38239i	90	185	37.0	- 80 27	8.96	9.7	Fo	4	..	20557b
41	1333	36.8	+ 47 48	8.0	8.6	Go	2	..	37438i	91	185	37.1	+ 82 36	8.8	9.9	K2	1	..	38330i
42	1568	36.8	+ 37 7	8.0	9.1	K2	2	..	38941i	92	233	37.1	+ 78 12	8.12	8.26	A5	3	..	37343i
43	1467	36.8	+ 23 19	8.2	8.6	F5	3	..	37441i	93	447	37.1	+ 66 59	8.5	9.0	F8	5	..	37545i
44	1409	36.8	+ 7 30	7.10	8.28	K5	5	0,3	37652i	94	1476	37.1	+ 35 20	8.0	8.1	A2	4	..	37527i
45	1681	36.8	- 6 35	10.1	10.1	B9	3	..	20803b	95	1392	37.1	+ 31 28	7.8	7.8	Ao	3	..	37527i
46	1528	36.8	- 7 26	9.8	9.8	B8	3	..	20803b	96	1391	37.1	+ 31 4	8.7	8.7	A	2	..	37527i
47	1583	36.8	- 17 52	8.9	8.9	Ao	3	..	18975b	97	1541	37.1	+ 20 5	8.60	8.58	B9	4	..	37441i
48	4318	36.8	- 25 0	9.25	9.3	F5	2	..	20535b	98	1447	37.1	+ 19 15	9.1	9.1	A	2	..	37441i
49	2751	36.8	- 39 13	9.4	9.9	G5	2	..	20534b	99	1280	37.1	+ 11 52	7.8	7.8	Ao	5	..	38200i
50	2596	36.8	- 43 18	7.04	7.2	B8	5	3,9	18558b	100	1620	37.1	- 4 40	9.0	9.1	A3	4	..	12671b

THE HENRY DRAPER CATALOGUE.

48200

6^h 37^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1522	37.1	- 8 30	9.8	10.4	Go	2	..	20803b	51	1070	37.4	+54 27	8.6	8.9	F2	4	..	37419i
2	1511	37.1	-18 12	9.6	10.0	F5	1	..	18975b	52	1362	37.4	+17 6	8.7	9.3	G	2	..	37441i
3	1495	37.1	-20 13	6.83	8.2	G5	8	5,3	20535b	53	1557	37.4	- 3 12	8.5	9.5	Ko	2	..	12671b
4	1494	37.1	-20 45	8.7	8.8	Fo	5	..	20535b	54	1624	37.4	- 4 16	9.4	9.4	Ao	4	..	20803b
5	1494	37.1	-22 7	8.9	9.1	Ko	2	..	20535b	55	1603	37.4	- 9 48	9.1	9.7	Go	3	..	24463b
6	3276	37.1	-26 3	9.3	9.0	Ao	5	0,2	24433b	56	1649	37.4	-10 8	9.56	9.90	F2	4	..	24463b
7	1058	37.2	+53 11	7.29	8.47	K5	4	..	37419i	57	1594	37.4	-11 28	9.1	9.1	Ao	4	..	24340b
8	1539	37.2	+49 27	8.0	8.4	F5	3	..	37500i	58	1573	37.4	-16 10	9.1	10.2	K2	2	E	24463b
9	1524	37.2	+44 40	9.4	9.4	Ao	3	..	5400m	59	1587	37.4	-17 52	9.0	9.3	Fo	2	..	18975b
10	1236	37.2	+10 26	8.3	9.4	K2	1	..	38200i	60	3415	37.4	-30 25	9.5	9.8	Go	2	..	24433b
11	1373	37.2	+ 5 17	8.5	8.9	F5	2	0,2	38168i	61	3412	37.4	-30 33	7.08	7.5	B9	9	..	18385b
12	1362	37.2	+ 2 59	7.7	7.7	B9	5	E	37652i	62	3076	37.4	-36 22	10.2	9.3	Go	2	..	20534b
13	1555	37.2	- 3 52	8.1	9.2	K2	1	..	38196i	63	2763	37.4	-39 18	10.4	10.4	Ko	1	..	20534b
14	1751	37.2	- 5 19	9.1	10.3	K5	2	..	20803b	64	2617	37.4	-40 22	8.1	8.4	Ao	2	2,3	18558b
15	1753	37.2	- 6 1	6.88	6.76	B5	10	3,10	12671b	65	2430	37.4	-48 27	8.3	8.5	G5	7	..	38414b
16	1525	37.2	- 8 32	9.6	9.6	Ao	4	..	24746b	66	2329	37.4	-50 58	9.6	9.4	F8	3	..	38414b
17	1601	37.2	- 9 4	5.32	6.50	K5	8	..	12672b	67	976	37.4	-52 44	7.4	8.2	K5	3	E	13007b
18	1572	37.2	-16 6	9.1	9.7	Go	2	..	39861b	68	259	37.5	+77 20	7.8	7.8	Ao	5	R	37343i
19	1584	37.2	-17 26	8.5	9.7	K5	1	..	18975b	69	465	37.5	+66 21	9.5	10.5	K	1	..	37545i
20	1556	37.2	-22 0	7.7	8.0	Ko	7	..	20535b	70	1525	37.5	+44 37	6.80	7.58	G5	5	5,8	37500i
21	3487	37.2	-25 9	9.60	10.2	Ko	2	..	24433b	71	1571	37.5	+37 6	7.8	8.1	Fo	5	..	37527i
22	3278	37.2	-26 51	10.7	10.1	F8	2	..	24433b	72	1494	37.5	+36 12	6.28	6.28	Ao	8	..	37527i
23	3285	37.2	-28 58	9.2	9.4	A3	4	..	24433b	73	1394	37.5	+33 4	8.7	8.8	A3	3	..	37527i
24	3408	37.2	-30 27	8.7	9.8	K5	2	..	24433b	74	1351	37.5	+21 40	9.4	9.4	A	2	..	37441i
25	2522	37.2	-41 9	8.8	9.5	Go	1	..	20556b	75	1352	37.5	+21 40	9.4	9.4	A	2	..	37441i
26	404	37.2	-76 42	9.7	10.7	Ko	1	..	20652b	76	1324	37.5	+18 15	7.63	7.61	B9	5	..	37441i
27	222	37.2	-79 23	9.8	10.3	F8	2	..	20652b	77	1281	37.5	+11 7	8.4	8.7	Fo	3	..	38200i
28	1696	37.3	+40 44	6.87	8.22	Ma	4	..	37397i	78	1365	37.5	+ 3 16	8.5	8.6	A5	2	..	20708b
29	1311	37.3	+30 53	9.4	9.4	A	1	..	37527i	79	1472	37.5	+ 1 49	7.8	7.6	B2	5	..	38196i
30	1217	37.3	+28 30	8.4	9.2	G5	2	..	38185i	80	1341	37.5	- 1 23	8.9	8.9	Ao	2	..	38196i
31	1322	37.3	+18 4	7.7	7.8	A3	4	..	37441i	81	1526	37.5	- 8 27	9.4	9.8	F5	2	..	24746b
32	1360	37.3	+17 57	8.3	8.4	A2	3	..	37441i	82	1651	37.5	-10 24	9.0	8.9	B5	3	..	24340b
33	1382	37.3	+13 29	8.7	8.8	A2	2	..	38200i	83	1595	37.5	-11 16	9.8	10.8	Ko	2	..	24463b
34	1459	37.3	+ 8 57	8.2	8.2	Ao	2	..	38200i	84	1614	37.5	-13 23	9.4	9.5	A2	2	..	24340b
35	1725	37.3	- 2 58	8.7	9.3	Go	3	..	12671b	85	1613	37.5	-13 41	9.6	9.7	A5	3	..	24463b
36	1684	37.3	- 6 14	8.7	8.8	A5	5	0,7	12671b	86	1479	37.5	-15 6	7.19	7.75	Go	8	..	18975b
37	1602	37.3	- 9 46	9.0	9.0	Ao	5	..	24463b	87	1478	37.5	-15 54	6.84	6.82	B9	6	..	8902b
38	1542	37.3	-14 22	8.5	9.6	K2	4	..	24340b	88	1513	37.5	-18 10	8.5	9.7	K5	1	..	18975b
39	1496	37.3	-20 29	9.1	8.5	A2	4	..	20535b	89	3203	37.5	-27 29	7.9	7.8	Ao	9	..	20582b
40	4328	37.3	-24 17	7.9	8.1	B9	8	..	20535b	90	2823	37.5	-38 14	8.8	9.8	Ko	2	..	20534b
41	3282	37.3	-26 54	9.5	10.1	G5	1	..	24433b	91	2516	37.5	-47 12	8.6	9.8	Ko	2	..	38414b
42	2998	37.3	-37 11	10.4	10.1	Go	1	..	20534b	92	1133	37.5	-53 21	7.20	7.6	A2	7	..	13007b
43	2604	37.3	-43 36	9.1	8.6	A5	5	..	20556b	93	748	37.5	-58 44	8.2	8.2	Fo	5	..	15176b
44	2603	37.3	-43 47	9.0	8.9	Ko	2	..	20556b	94	265	37.5	-77 55	10.4	11.4	Ko	1	..	20652b
45	2513	37.3	-47 14	10.5	9.9	F8	2	..	38414b	95	85	37.5	-86 44	9.5	9.8	Fo	3	..	22238b
46	676	37.3	-60 5	7.16	6.8	B9	4	..	42927b	96	1180	37.6	+46 5	8.4	8.4	Ao	4	0,7	37500i
47	634	37.3	-67 22	9.1	9.2	A3	4	..	18485b	97	..	37.6	+45 53	..	..	G	1	..	5400m
48	126	37.3	-83 43	9.7	10.1	F5	3	..	20557b	98	1526	37.6	+44 19	9.5	10.0	F8	2	..	5400m
49	335	37.4	+72 48	9.5	10.5	K	2	..	37559i	99	1442	37.6	+34 16	8.4	9.0	Go	3	..	37527i
50	1015	37.4	+59 33	4.89	4.95	A2	..	..	56,83	100	1377	37.6	+ 5 17	8.3	8.6	Fo	3	..	38168i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

48300

6^h 37^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1560	m. 37.6	° 3 44	7.5	7.6	A2	5	..	38196i	51	1529	m. 37.9	° 8 32	9.2	10.4	K5	4	..	24746b
2	1755	37.6	- 5 58	9.4	9.4	Ao	4	0,3	20803b	52	1655	37.9	-10 38	7.7	7.8	A2	7	..	24340b
3	1687	37.6	- 6 23	10.5	10.6	A5	2	..	20803b	53	1598	37.9	-11 42	9.8	9.8	Ao	2	..	24463b
4	1588	37.6	-17 40	8.9	9.0	A2	2	..	18975b	54	1502	37.9	-21 1	8.9	8.8	Ao	5	..	20535b
5	3035	37.6	-34 25	7.38	8.6	K5	4	..	20534b	55	1498	37.9	-22 20	8.5	7.6	B5	6	..	20535b
6	2369	37.6	-49 23	10.9	10.9	Go	2	..	38414b	56	3363	37.9	-29 2	9.5	10.1	F8	2	..	24433b
7	1121	37.7	+52 12	9.2	9.5	F2	2	..	37419i	57	3279	37.9	-32 11	8.7	9.5	K2	1	..	18385b
8	1395	37.7	+33 56	8.2	8.8	Go	2	..	37527i	58	2834	37.9	-38 49	8.7	10.4	K2	2	..	20534b
9	1312	37.7	+30 57	9.1	9.2	A5	1	..	37527i	59	679	37.9	-60 55	8.3	9.9	Ko	3	..	15147b
10	1450	37.7	+22 34	8.8	9.6	G5	1	..	38185i	60	618	37.9	-63 27	8.9	8.9	B9	5	..	15147b
11	1606	37.7	- 9 28	8.4	8.4	Ao	3	..	12672b	61	452	38.0	+68 37	9.4	10.2	G5	2	..	38155i
12	1654	37.7	-10 12	9.2	9.3	A2	4	..	24463b	62	1122	38.0	+52 20	8.6	8.6	Ao	4	..	37419i
13	1593	37.7	-12 12	9.2	9.2	Ao	1	..	24340b	63	1336	38.0	+47 10	8.0	8.4	F5	3	..	37500i
14	1591	37.7	-12 33	9.2	9.8	Go	3	..	24463b	64	1313	38.0	+30 37	8.7	8.8	A2	1	..	37527i
15	1498	37.7	-20 9	6.98	8.2	Ko	4	5,8	8902b	65	1375	38.0	+24 40	8.6	8.7	A2	2	..	38185i
16	3500	37.7	-25 51	10.4	9.6	Ao	3	..	24433b	66	1243	38.0	+10 41	8.3	9.1	G5	2	..	38200i
17	3289	37.7	-26 51	11.8	10.2	G5	1	..	24433b	67	1420	38.0	+ 7 54	8.3	8.7	F5	3	..	12670b
18	3208	37.7	-27 47	8.7	8.4	Fo	7	..	20582b	68	1555	38.0	+ 0 10	8.7	9.5	G5	2	5,1	38196i
19	3297	37.7	-28 11	8.3	9.0	G5	3	..	20582b	69	1344	38.0	- 2 0	9.07	9.07	Ao	3	..	12671b
20	3078	37.7	-36 52	10.2	9.8	F8	1	..	20534b	70	1732	38.0	- 2 47	8.5	9.3	G5	2	..	38196i
21	617	37.7	-63 57	9.7	9.8	A2	3	..	15147b	71	1759	38.0	- 5 45	9.1	9.4	F2	4	..	20803b
22	639	37.7	-69 21	9.0	10.0	Ko	2	..	15168b	72	1534	38.0	- 7 35	9.4	9.8	F5	3	..	24463b
23	236	37.7	-78 3	10.7	11.2	F8	2	..	20652b	73	1517	38.0	-18 11	8.9	9.0	A3	3	..	18975b
24	186	37.7	-80 30	8.72	9.4	A2	7	..	20557b	74	1518	38.0	-19 0	8.9	9.3	F5	4	..	18975b
25	1059	37.8	+53 44	8.6	8.9	Fo	3	..	37419i	75	1530	38.0	-19 40	9.1	8.6	Ao	4	..	20535b
26	1335	37.8	+46 58	8.6	8.7	A5	6	5,2	5400m	76	1531	38.0	-19 59	8.68	8.8	Ao	3	..	20535b
27	1574	37.8	+37 37	9.4	9.4	Ao	1	..	38941i	77	1503	38.0	-20 45	9.2	8.8	Ao	4	..	20535b
28	..	37.8	+30 3	Nov.	Nov.	Pec.	..	R	76,36	78	4340	38.0	-24 7	9.3	8.8	F5	5	..	20535b
29	1406	37.8	+25 14	3.18	3.06	G5	..	R	1641c	79	3212	38.0	-27 8	10.4	9.7	A5	3	..	24433b
30	1260	37.8	+16 53	7.9	7.9	Ao	5	..	37441i	80	3423	38.0	-30 36	9.0	8.9	Fo	1	..	18385b
31	1240	37.8	+10 17	8.7	8.7	Ao	2	..	38200i	81	3156	38.0	-33 22	8.4	9.5	K5	2	..	12657b
32	1627	37.8	- 4 2	6.65	7.07	F5	6	..	38196i	82	2626	38.0	-40 11	7.95	7.9	Ao	3	..	18558b
33	1528	37.8	- 8 28	9.6	9.7	A5	3	..	24746b	83	2625	38.0	-40 15	6.12	6.3	B5	8	..	18558b
34	1616	37.8	-13 9	9.4	10.4	Ko	2	..	24463b	84	2674	38.0	-45 39	9.6	9.9	F5	4	..	38414b
35	1617	37.8	-13 16	9.8	9.8	Ao	3	..	24463b	85	392	38.0	-73 29	9.6	10.0	F5	4	..	20652b
36	1495	37.8	-22 23	9.1	8.6	Ao	3	..	20535b	86	391	38.0	-75 7	9.18	9.4	Ao	6	..	20652b
37	3506	37.8	-25 1	10.7	10.2	F2	2	..	24433b	87	450	38.1	+67 11	9.7	9.7	Ao	2	..	37545i
38	3211	37.8	-27 31	7.7	8.7	Ko	6	..	20582b	88	658	38.1	+63 10	8.0	8.8	G5	5	..	37545i
39	3210	37.8	-27 39	9.0	9.1	Ko	2	..	20582b	89	1003	38.1	+57 54	8.0	8.4	F5	6	..	38239i
40	3298	37.8	-28 6	10.7	9.9	F5	2	..	24433b	90	1181	38.1	+46 48	9.9	9.9	Ao	3	..	5400m
41	3299	37.8	-28 48	10.2	10.2	F5	2	..	24433b	91	1389	38.1	+32 5	8.0	8.4	F5	4	..	37527i
42	2841	37.8	-44 19	8.3	8.9	G5	3	..	20556b	92	1257	38.1	+12 9	8.4	8.4	Ao	5	..	38200i
43	2596	37.8	-46 17	9.2	9.8	Ko	4	..	38414b	93	1380	38.1	+ 5 57	7.20	8.20	Ko	4	5,4	38168i
44	1212	37.9	+27 35	8.2	8.2	B9	6	..	38185i	94	1556	38.1	+ 0 5	7.73	8.51	G5	4	..	38196i
45	1326	37.9	+18 46	7.6	8.4	G5	4	..	37441i	95	1733	38.1	- 2 27	9.2	9.2	Ao	2	..	12671b
46	1241	37.9	+10 50	8.7	8.8	A5	1	..	38200i	96	1695	38.1	- 6 2	10.5	10.6	A2	2	..	20803b
47	1360	37.9	+ 6 14	8.3	8.4	A2	5	2,4	38168i	97	1658	38.1	-10 4	10.5	10.5	Ao	3	..	24463b
48	1371	37.9	+ 3 8	6.44	7.44	Ko	5	..	37652i	98	1659	38.1	-10 34	9.8	10.8	Ko	3	..	24463b
49	1729	37.9	- 2 38	8.9	9.9	Ko	1	..	20867b	99	1597	38.1	-12 50	8.5	9.6	K2	2	..	24340b
50	1691	37.9	- 6 16	9.2	9.2	Ao	3	..	20803b	100	1592	38.1	-17 42	8.9	9.0	A2	3	..	18975b

THE HENRY DRAPER CATALOGUE.

48400

6^h 38^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3213	38.1	-27 52	10.7	9.6	A2	1	..	20582b	51	1453	38.4	+22 41	8.6	9.7	K2	1	..	38185i
2	2520	38.1	-47 31	6.57	7.0	B8	4	1,10	9026b	52	1289	38.4	+11 53	8.4	8.5	A5	1	..	38200i
3	2521	38.1	-47 34	6.47	7.7	Ma	7	..	38414b	53	1382	38.4	+ 5 23	8.9	9.0	A2	2	..	38168i
4	2436	38.1	-48 30	9.1	10.6	K5	2	..	38414b	54	1762	38.4	- 5 17	9.4	9.5	A3	3	..	20803b
5	682	38.1	-60 52	7.9	9.9	K5	3	..	15147b	55	1532	38.4	- 8 23	10.1	10.1	A	1	R	24746b
6	513	38.1	-72 41	9.2	10.0	G5	3	..	15167b	56	..	38.4	-10 40	..	..	A2	2	..	24463b
7	266	38.1	-77 30	10.0	10.5	F8	2	..	20652b	57	1553	38.4	-14 30	10.1	11.1	Ko	1	..	24463b
8	365	38.2	+71 44	8.5	9.0	F8	2	..	37559i	58	1481	38.4	-15 38	7.5	7.8	F2	6	..	18975b
9	1543	38.2	+49 11	8.5	8.6	A3	4	..	37438i	59	1532	38.4	-19 32	9.1	9.4	F5	1	..	18975b
10	1528	38.2	+44 21	7.8	8.4	Go	4	0,7	37500i	60	3514	38.4	-25 35	7.9	8.5	Ao	7	0,8	20535b
11	1730	38.2	+39 55	8.4	8.4	Ao	2	R	38941i	61	3516	38.4	-25 44	9.5	9.6	Go	4	..	24433b
12	1731	38.2	+39 29	6.97	7.25	Fo	7	E	37397i	62	3372	38.4	-29 28	9.3	11.0	K2	1	..	24433b
13	1314	38.2	+30 35	8.2	8.2	B9	3	..	37527i	63	3373	38.4	-29 57	8.7	9.2	F8	3	..	24433b
14	1287	38.2	+11 17	8.4	8.4	A	2	..	38200i	64	2676	38.4	-45 10	9.00	8.9	A3	4	1,3-	45973b
15	1478	38.2	+ 1 10	9.1	9.2	A2	1	..	20708b	65	2028	38.4	-51 34	8.5	9.1	Go	2	..	10697b
16	1558	38.2	+ 0 23	8.3	8.7	F5	2	..	38196i	66	1077	38.4	-54 22	8.9	10.0	K5	1	..	13007b
17	1632	38.2	- 4 40	9.1	10.1	Ko	2	..	12671b	67	542	38.4	-70 49	7.9	7.9	Ao	8	0,2	15167b
18	1697	38.2	- 6 40	8.7	8.8	A3	6	..	20895b	68	1182	38.5	+46 35	9.9	11.0	K2	1	..	5400m
19	1609	38.2	- 9 37	8.5	8.5	B9	3	..	12672b	69	1348	38.5	+45 52	9.5	10.3	G5	3	..	5400m
20	1610	38.2	- 9 58	8.71	8.71	Ao	7	..	24463b	70	1529	38.5	+44 25	9.5	10.1	Go	2	..	5400m
21	1660	38.2	-10 52	10.1	11.2	K2	2	..	24463b	71	1480	38.5	+23 33	8.6	9.1	F8	2	..	38185i
22	1506	38.2	-20 28	9.1	9.1	Fo	3	..	20535b	72	1369	38.5	+ 9 10	8.5	8.6	A2	4	..	38200i
23	1505	38.2	-20 39	9.4	9.4	Ao	3	..	20535b	73	1425	38.5	+ 7 36	8.2	8.2	Ao	4	..	12670b
24	1503	38.2	-22 15	8.7	8.6	B8	4	..	20535b	74	1635	38.5	- 4 19	9.2	10.2	Ko	2	..	20803b
25	4239	38.2	-23 8	6.90	7.3	B5	4	2,9	8902b	75	1763	38.5	- 5 36	9.1	10.3	K5	2	..	20803b
26	4238	38.2	-23 52	9.5	9.1	Ao	2	..	20535b	76	..	38.5	- 7 48	..	..	Ko	2	..	24463b
27	4344	38.2	-24 8	9.0	9.6	Ko	3	..	24433b	77	1606	38.5	-11 18	10.1	11.1	K2	2	..	24463b
28	3511	38.2	-25 53	9.5	9.4	Fo	3	..	24433b	78	1603	38.5	-11 40	10.5	10.5	B9	3	..	24463b
29	2846	38.2	-45 1	8.74	8.6	A3	5	0,4-	45973b	79	1604	38.5	-11 56	9.2	9.2	Ao	2	..	24340b
30	1134	38.2	-53 58	9.2	9.6	F5	1	..	13007b	80	1599	38.5	-12 18	9.1	10.1	Ko	3	..	24463b
31	622	38.2	-63 22	8.7	9.3	Go	5	..	15147b	81	1622	38.5	-13 36	6.97	6.97	Ao	10	..	24340b
32	1004	38.3	+57 17	5.47	6.25	G5	10	E	37526i	82	1533	38.5	-19 15	8.7	8.8	Ao	4	..	18975b
33	1390	38.3	+13 20	4.65	5.65	Ko	..	0,9	1686c	83	4346	38.5	-24 22	8.3	8.7	Ko	5	..	20535b
34	1414	38.3	+ 4 2	5.78	5.54	Bo	8	0,8	38196i	84	3308	38.5	-26 33	9.2	10.1	Ko	1	..	24433b
35	1734	38.3	- 2 39	8.5	9.5	Ko	2	..	38196i	85	3583	38.5	-31 34	7.8	7.6	B9	6	..	18385b
36	1535	38.3	- 7 56	9.1	10.1	Ko	3	..	24463b	86	2681	38.5	-45 27	9.6	10.6	Ko	2	..	38414b
37	1531	38.3	- 8 24	9.8	9.9	A3	4	..	24746b	87	2440	38.5	-48 23	9.8	10.3	G5	2	..	38414b
38	1601	38.3	-11 20	9.6	10.6	Ko	2	..	24463b	88	393	38.5	-73 8	9.9	10.5	G	1	..	20652b
39	1602	38.3	-11 39	7.9	7.9	Ao	8	..	24340b	89	1349	38.6	+50 29	7.12	7.12	Ao	7	..	37438i
40	1598	38.3	-12 13	9.2	9.2	Ao	2	..	24340b	90	..	38.6	+46 29	..	..	G	1	..	5400m
41	1619	38.3	-13 18	9.1	9.4	Fo	3	0,3	24340b	91	1531	38.6	+44 55	9.4	10.4	Ko	2	..	5400m
42	4241	38.3	-23 15	8.3	9.2	Ko	1	..	20535b	92	1530	38.6	+44 19	8.8	9.8	Ko	4	..	5400m
43	3303	38.3	-26 52	10.0	10.1	G5	1	..	24433b	93	1595	38.6	+38 30	7.90	8.04	A5	3	E	37397i
44	2838	38.3	-38 10	10.7	9.8	A5	2	..	20534b	94	1549	38.6	+20 48	7.04	7.04	Ao	8	..	37441i
45	2376	38.3	-49 21	10.5	11.2	Ko	1	..	38414b	95	1374	38.6	+ 3 34	8.8	9.8	Ko	1	..	38168i
46	684	38.3	-60 18	7.76	8.4	G5	5	..	15147b	96	1480	38.6	+ 1 43	9.1	9.1	B9	2	..	38196i
47	631	38.3	-65 59	7.3	8.3	Ko	8	..	18485b	97	1349	38.6	- 1 15	7.5	7.5	B8	6	..	38196i
48	366	38.4	+71 7	9.2	9.5	F	2	R	37559i	98	1663	38.6	-10 26	8.9	10.1	K5	3	..	24463b
49	1231	38.4	+51 56	8.2	8.6	F5	3	..	37419i	99	1662	38.6	-10 58	9.1	9.5	F5	4	..	24463b
50	1327	38.4	+29 4	5.54	6.54	Ko	7	R	37527i	100	1483	38.6	-15 24	8.5	9.5	Ko	2	..	18975b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

48500

6^h 38^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Lat.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Lat.	Rem.	Pl. No.
1	1505	38.6	-22 21	6.20	6.6	Fo	7	0,10	8902b	51	1261	38.9	+11 58	8.1	8.1	Ao	4	..	38200i
2	3314	38.6	-28 29	9.5	10.8	K5	1	..	24433b	52	1417	38.9	+4 29	8.9	9.9	Ko	2	..	20708b
3	2777	38.6	-39 41	7.6	7.7	Ao	7	0,4	20556b	53	1369	38.9	+2 30	8.7	8.5	B3	2	..	20708b
4	2443	38.6	-48 46	9.2	10.6	K2	2	..	38414b	54	1619	38.9	-9 19	9.2	9.2	B9	4	..	24746b
5	979	38.6	-52 20	var.	var.	Mc	2	R	38414b	55	1667	38.9	-10 22	9.4	10.8	Ma	1	..	24463b
6	234	38.7	+78 8	7.74	8.24	F8	4	..	37343i	56	1522	38.9	-18 6	8.9	8.9	Ao	3	..	18975b
7	1005	38.7	+57 23	8.6	9.0	F5	3	E	37526i	57	1536	38.9	-19 3	8.5	8.8	Ko	3	..	18975b
8	1124	38.7	+52 12	9.2	10.4	K5	..	..	M	58	3054	38.9	-34 15	8.0	8.0	Ao	5	2,2	20534b
9	1594	38.7	+43 8	10.2	10.8	G	1	..	5400m	59	686	38.9	-59 1	7.6	7.6	B8	3	..	42927b
10	1318	38.7	+30 57	7.13	7.13	Ao	7	..	37527i	60	966	39.0	+58 41	9.5	9.6	A5	3	..	37526i
11	1701	38.7	-6 54	9.6	9.7	A2	2	..	20895b	61	1063	39.0	+53 39	9.0	9.3	Fo	1	..	37419i
12	..	38.7	-9 11	..	..	A2	2	..	24746b	62	1184	39.0	+46 39	9.7	10.7	Ko	4	..	5400m
13	1617	38.7	-9 24	9.2	9.2	Ao	5	..	24746b	63	1497	39.0	+41 53	7.6	8.6	Ko	2	..	37397i
14	1615	38.7	-9 59	9.23	10.01	G5	2	..	24463b	64	1578	39.0	+37 53	8.2	9.4	K5	2	5,1	38941i
15	1601	38.7	-12 33	10.1	11.3	K5	2	..	24463b	65	1552	39.0	+20 58	7.07	7.57	F8	6	..	37441i
16	1602	38.7	-12 48	8.5	9.5	Ko	4	..	24340b	66	1460	39.0	+19 38	7.9	8.2	Fo	4	..	37441i
17	1624	38.7	-13 45	8.9	8.9	Ao	4	..	24340b	67	1469	39.0	+8 25	8.3	8.4	A2	2	..	38200i
18	1484	38.7	-15 44	7.9	9.0	K2	4	..	18975b	68	1370	39.0	+6 24	7.9	8.2	F2	6	..	37652i
19	1595	38.7	-17 33	8.9	9.2	Fo	2	..	18975b	69	1767	39.0	-5 56	9.6	9.7	A2	3	..	20803b
20	1521	38.7	-18 37	9.6	9.9	F2	1	..	18975b	70	1705	39.0	-6 48	8.7	8.7	Ao	7	..	20895b
21	1508	38.7	-20 3	8.43	9.4	Mb	2	..	20535b	71	1536	39.0	-8 57	9.0	9.6	Go	4	0,3	24746b
22	3520	38.7	-25 32	9.5	9.0	Fo	6	2,3	24433b	72	1607	39.0	-11 24	10.2	11.2	Ko	2	..	24463b
23	3312	38.7	-26 15	10.2	10.2	Go	1	..	24433b	73	1625	39.0	-13 5	8.3	8.3	Ao	8	..	24340b
24	3013	38.7	-37 54	9.0	8.6	G5	4	..	20534b	74	1565	39.0	-21 45	7.26	6.8	B8	4	5,8	8902b
25	2534	38.7	-41 10	8.7	9.6	K2	1	..	20556b	75	4356	39.0	-24 20	10.9	9.6	Ma	3	..	20535b
26	686	38.7	-60 20	9.5	10.0	F8	2	..	15147b	76	4354	39.0	-24 48	10.2	9.9	A2	3	..	24433b
27	543	38.7	-70 30	7.3	7.8	F8	3	..	9062b	77	3524	39.0	-25 47	10.4	9.6	A5	3	..	24433b
28	1006	38.8	+57 46	8.8	9.4	G	2	E	37526i	78	3326	39.0	-28 24	10.0	10.1	Ao	2	..	24433b
29	1072	38.8	+54 27	8.9	9.0	A2	3	..	37419i	79	3324	39.0	-28 47	8.7	9.0	Ao	3	..	20582b
30	1340	38.8	+47 24	8.4	8.5	A3	4	..	37500i	80	3443	39.0	-30 48	7.9	8.6	A2	2	..	18385b
31	1183	38.8	+46 56	9.9	10.4	F8	2	..	5400m	81	3298	39.0	-32 36	6.76	7.3	Fo	4	5,9	9042b
32	1550	38.8	+20 6	8.60	8.43	B3	4	..	37441i	82	514	39.0	-72 4	9.5	10.7	K5	1	..	15167b
33	1369	38.8	+6 18	8.5	8.5	B8	5	..	12670b	83	393	39.0	-75 44	9.3	9.9	Go	4	..	20652b
34	1388	38.8	+5 19	8.5	8.9	F5	3	3,1	37652i	84	270	39.0	-77 36	6.71	7.7	F5	10	..	20652b
35	1367	38.8	+2 54	8.9	8.9	Ao	2	..	38168i	85	192	39.0	-81 6	9.5	10.3	G5	1	..	20557b
36	1665	38.8	-10 13	9.2	10.0	G5	2	..	24463b	86	390	39.1	+69 36	8.9	9.5	Go	2	..	38169i
37	1666	38.8	-10 50	9.6	9.7	A3	3	..	24463b	87	1600	39.1	+42 22	7.25	8.25	Ko	3	..	37397i
38	1535	38.8	-19 22	8.7	9.4	Ko	1	..	18975b	88	1601	39.1	+42 8	8.2	8.3	A2	4	..	37397i
39	1509	38.8	-20 20	8.7	8.8	Go	4	..	20535b	89	1736	39.1	+39 5	7.20	7.20	Ao	5	E	37397i
40	4257	38.8	-23 18	9.7	9.1	F8	2	..	20535b	90	1320	39.1	+30 18	9.1	9.1	Ao	1	..	37527i
41	3313	38.8	-26 1	9.2	10.1	Ko	2	..	24433b	91	1332	39.1	+29 28	8.6	9.2	Go	2	..	37527i
42	2843	38.8	-38 6	10.2	9.8	A2	2	..	20534b	92	1378	39.1	+17 50	8.9	8.9	A	1	..	37441i
43	2844	38.8	-38 18	6.31	7.0	A3	7	..	18558b	93	1472	39.1	+8 46	8.7	8.7	Ao	1	..	38200i
44	2446	38.8	-48 21	10.5	10.6	A	2	R	38414b	94	1391	39.1	+5 19	7.41	8.41	Ko	4	5,4	38168i
45	269	38.8	-77 1	9.6	10.2	Go	3	..	20652b	95	1377	39.1	+3 24	9.1	9.5	F5	2	..	20708b
46	187	38.8	-80 45	9.4	9.8	F5	2	..	20557b	96	1370	39.1	+2 55	8.3	9.3	Ko	1	E	38168i
47	602	38.9	+64 52	8.30	9.48	K5	3	..	37545i	97	1535	39.1	-8 30	9.2	9.2	A	3	..	24463b
48	1456	38.9	+22 57	6.75	6.81	A2	8	..	37441i	98	1622	39.1	-9 9	10.7	10.8	A3	2	..	24746b
49	1458	38.9	+22 9	9.0	9.0	B8	3	R	38185i	99	1626	39.1	-13 45	8.9	10.3	Ma	2	..	24463b
50	1330	38.9	+18 12	8.7	8.8	A3	2	..	37441i	100	1566	39.1	-21 38	8.0	8.3	Ko	5	..	20535b

THE HENRY DRAPER CATALOGUE.

48600

6^h 39^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3528	39.1	-25 45	9.2	9.1	Go	5	5,2	24433b	51	2611	39.3	-46 22	8.6	9.9	G5	4	..	38414b
2	3319	39.1	-26 1	7.9	9.3	Ma	6	0,1	24433b	52	2350	39.3	-50 54	9.2	9.2	F5	4	..	38414b
3	3328	39.1	-28 5	9.0	9.6	G5	1	..	20582b	53	687	39.3	-60 29	9.7	9.7	A	2	..	15147b
4	3381	39.1	-29 35	9.7	10.1	A2	2	..	24433b	54	636	39.3	-65 10	8.09	8.4	Ao	5	..	18485b
5	3058	39.1	-34 41	8.0	9.0	K5	2	..	20534b	55	395	39.3	-75 42	9.3	9.6	Fo	5	..	20652b
6	3094	39.1	-36 8	8.0	9.3	Ko	3	..	20534b	56	543	39.4	+64 58	8.85	9.85	Ko	3	..	37545i
7	2538	39.1	-41 40	9.0	9.5	G	1	..	20556b	57	878	39.4	+62 14	8.9	9.0	A5	2	..	38239i
8	2347	39.1	-50 21	9.8	10.3	Ao	3	..	38414b	58	1185	39.4	+46 8	8.8	8.8	Ao	5	..	5400m
9	981	39.1	-52 35	7.7	7.7	Fo	6	E	13007b	59	1349	39.4	+45 40	9.7	10.5	G5	3	..	5400m
10	980	39.1	-52 51	9.1	9.4	A	2	E	38414b	60	1533	39.4	+44 28	8.6	9.6	Ko	4	..	5400m
11	544	39.1	-70 51	8.3	9.1	G5	3	..	15167b	61	1336	39.4	+29 26	8.4	8.4	Ao	3	..	37527i
12	405	39.1	-76 55	9.3	10.5	K5	2	..	20652b	62	1393	39.4	+13 51	8.7	8.7	Ao	4	..	38200i
13	1497	39.2	+36 8	8.6	8.9	Fo	2	..	37527i	63	1267	39.4	+12 21	8.4	8.4	Ap	3	R	38200i
14	1395	39.2	+32 11	8.8	8.9	A2	2	..	37527i	64	1381	39.4	+3 25	9.6	..	Pec.	..	R	M
15	1264	39.2	+12 11	8.8	8.8	A	1	R	38200i	65	1741	39.4	-2 19	8.5	8.5	Ao	5	..	38196i
16	1379	39.2	+3 15	7.3	7.9	Go	5	..	37652i	66	1641	39.4	-4 30	8.7	9.0	F2	4	..	12671b
17	1351	39.2	-1 11	9.3	9.4	A3	2	E	20867b	67	1770	39.4	-5 35	9.4	9.9	F8	2	..	20803b
18	1739	39.2	-2 52	9.8	9.8	A	2	..	20867b	68	1709	39.4	-7 2	9.1	9.1	Ao	4	..	20895b
19	1640	39.2	-4 17	9.2	9.2	Ao	3	..	12671b	69	1542	39.4	-7 49	10.1	10.1	Ao	1	..	24463b
20	1539	39.2	-7 18	9.4	9.4	B9	3	..	20895b	70	1669	39.4	-10 53	8.3	9.1	G5	2	..	24340b
21	1540	39.2	-7 31	8.9	9.9	Ko	3	..	20895b	71	1612	39.4	-11 13	9.6	9.7	A3	3	..	24463b
22	1624	39.2	-9 22	8.9	10.0	K2	4	..	24746b	72	1606	39.4	-12 36	10.7	10.7	Ao	2	..	24463b
23	1605	39.2	-12 44	9.1	9.2	A2	2	..	24340b	73	1560	39.4	-14 35	8.7	8.7	Ao	2	..	8902b
24	1557	39.2	-14 6	9.6	10.2	Go	2	..	24463b	74	2543	39.4	-41 43	7.4	8.4	Ko	6	..	20556b
25	1489	39.2	-15 56	7.7	8.8	K2	5	..	18975b	75	2682	39.4	-42 17	var.	var.	Md	..	R	M
26	4358	39.2	-24 28	10.2	9.6	Fo	3	..	24433b	76	2683	39.4	-42 28	8.3	8.6	Go	6	..	20556b
27	3320	39.2	-26 45	10.4	10.4	Ko	1	..	24433b	77	2612	39.4	-46 57	10.2	10.6	F	2	..	38414b
28	3331	39.2	-28 15	7.04	7.9	Ao	10	..	20582b	78	689	39.4	-60 34	8.3	9.1	F8	3	..	15147b
29	3388	39.2	-29 8	7.12	7.2	Ao	10	..	20582b	79	227	39.5	+81 3	8.9	9.5	Go	2	..	38330i
30	3097	39.2	-36 32	8.0	7.7	Ao	2	0,8	18558b	80	452	39.5	+67 38	8.2	9.4	K5	4	..	37545i
31	2539	39.2	-41 37	7.9	8.7	G5	4	..	20556b	81	659	39.5	+63 49	9.4	9.8	F5	3	..	37545i
32	2382	39.2	-49 17	8.9	8.8	F2	6	..	38414b	82	1595	39.5	+43 41	5.34	5.90	Go	9	R	37500i
33	2349	39.2	-50 23	9.6	10.6	Ko	1	..	38414b	83	1580	39.5	+37 44	8.4	8.4	Ao	3	..	38941i
34	394	39.2	-73 47	9.3	10.5	K5	2	..	20652b	84	1401	39.5	+33 8	7.8	8.3	F8	3	..	37527i
35	1019	39.3	+59 48	8.9	9.0	A5	3	..	37526i	85	1346	39.5	+26 54	9.0	10.4	Ma	..	..	M
36	1433	39.3	+48 32	9.2	9.2	Ao	1	..	37438i	86	1489	39.5	+23 58	9.1	9.2	A5	1	..	38185i
37	1532	39.3	+44 7	9.4	9.4	Ao	4	..	5400m	87	1268	39.5	+12 24	8.4	8.4	Ao	3	..	38200i
38	1219	39.3	+27 47	6.76	7.76	Ko	6	..	38185i	88	1253	39.5	+10 52	7.9	8.5	Go	2	..	38200i
39	1345	39.3	+26 22	8.6	8.6	Ao	3	..	38185i	89	1433	39.5	+7 34	8.3	8.4	A2	3	..	12670b
40	1386	39.3	+24 46	7.16	8.23	K2	3	..	38185i	90	1421	39.5	+4 29	9.3	9.3	Ao	3	..	20708b
41	1486	39.3	+23 46	7.6	8.7	K2	3	..	37441i	91	1574	39.5	+0 42	7.7	7.6	B5	5	R	38196i
42	1571	39.3	+0 1	8.08	9.08	Ko	3	0,3	38196i	92	..	39.5	-5 29	..	..	A2	1	..	20803b
43	1353	39.3	-1 45	9.9	9.9	B9	3	..	20867b	93	1772	39.5	-5 46	9.4	10.0	Go	1	..	20803b
44	1541	39.3	-8 1	9.6	9.7	A2	3	..	24463b	94	1771	39.5	-6 0	9.1	10.2	K2	2	..	20803b
45	1538	39.3	-8 19	9.1	10.3	K5	2	0,1	24463b	95	1539	39.5	-8 19	9.1	9.2	A3	4	..	24463b
46	3322	39.3	-26 7	10.7	10.1	Go	2	..	24433b	96	1626	39.5	-9 10	10.2	11.2	K	1	..	24746b
47	3325	39.3	-26 21	8.0	8.5	F5	4	..	12656b	97	1670	39.5	-10 21	9.1	9.4	Fo	2	..	24340b
48	3390	39.3	-29 1	9.2	9.4	F8	3	..	24433b	98	1671	39.5	-10 40	9.1	9.2	A2	2	..	24340b
49	3600	39.3	-31 19	9.7	9.8	A	2	E	24433b	99	1613	39.5	-11 46	9.6	9.6	B9	3	..	24463b
50	3305	39.3	-32 53	10.0	8.9	Ao	2	..	12657b	100	..	39.5	-11 56	..	..	G5	1	..	24463b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

48700

6^h 39^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1561	39.5	-14 25	10.5	10.5	A	2	..	24463b	51	1294	39.8	+11 41	8.4	9.2	G5	2	..	38200i
2	1514	39.5	-20 38	9.6	9.1	Ao	2	..	20535b	52	1374	39.8	+ 9 47	8.22	8.20	B9	3	..	38200i
3	4284	39.5	-23 40	9.7	9.1	F8	2	..	20535b	53	1424	39.8	+ 4 36	8.7	8.7	Ao	2	..	37652i
4	3328	39.5	-26 3	8.3	8.7	F5	3	..	12656b	54	1644	39.8	- 4 17	8.9	9.0	A5	5	..	12671b
5	3339	39.5	-28 56	9.7	10.1	K5	1	..	24433b	55	1712	39.8	- 6 54	9.8	9.8	B9	1	..	20895b
6	3061	39.5	-34 38	8.0	9.3	K2	2	..	20534b	56	1627	39.8	- 9 39	9.8	9.8	Ao	4	..	24463b
7	2529	39.5	-47 49	9.6	10.7	K2	2	..	38414b	57	1528	39.8	-18 18	8.6	8.6	Ao	6	..	18975b
8	2457	39.5	-48 9	9.8	10.3	Fo	2	..	38414b	58	3546	39.8	-25 26	6.78	7.9	G5	8	..	20582b
9	2455	39.5	-48 29	9.4	9.7	F5	4	..	38414b	59	3545	39.8	-25 40	8.5	8.7	F2	5	..	20582b
10	1544	39.6	+49 29	8.5	8.5	Ao	4	..	37438i	60	3335	39.8	-26 21	10.0	9.9	Go	2	..	24433b
11	1186	39.6	+46 12	9.0	9.6	Go	3	..	5400m	61	3090	39.8	-35 31	8.4	8.6	Ao	4	..	20534b
12	1351	39.6	+45 29	9.7	10.8	K2	1	..	5400m	62	2793	39.8	-39 2	10.0	9.6	Ao	2	..	20534b
13	1350	39.6	+45 9	9.7	10.9	K5	1	..	5400m	63	2042	39.8	-51 39	8.2	9.1	G5	2	..	10697b
14	1451	39.6	+34 24	9.1	9.4	F	2	..	37527i	64	1041	39.8	-55 54	8.2	9.4	Ko	3	..	13007b
15	1390	39.6	+24 14	8.2	8.3	A3	3	..	38185i	65	453	39.9	+67 8	9.4	10.2	G5	1	..	38155i
16	1395	39.6	+13 27	8.3	8.3	Aop	5	R	38200i	66	1122	39.9	+55 49	6.28	6.70	F5	8	0.9 R	38239i
17	1382	39.6	+ 3 47	7.7	7.6	B5	6	0.4	20708b	67	1122	39.9	+55 49	6.33	6.75	F5	8	0.9 R	38239i
18	1374	39.6	+ 2 16	9.3	9.8	F8	1	..	20708b	68	1310	39.9	+15 55	8.1	8.2	A2	2	..	37441i
19	1413	39.6	- 1 0	9.1	9.2	A5	3	..	20867b	69	1295	39.9	+11 29	8.9	9.0	A5	1	..	38200i
20	1642	39.6	- 4 23	9.1	9.1	Ao	3	..	12671b	70	1477	39.9	+ 8 56	8.1	8.1	Ao	3	..	38200i
21	1643	39.6	- 4 44	9.8	9.8	Ao	2	..	20803b	71	1394	39.9	+ 5 19	7.47	7.47	Ao	6	0.7	38168i
22	1672	39.6	-11 1	8.3	8.6	F2	6	..	24340b	72	1775	39.9	- 5 21	9.8	9.8	Ao	3	..	20803b
23	1608	39.6	-12 18	9.2	9.2	Ao	3	..	24340b	73	1632	39.9	-13 3	10.1	10.1	Ao	2	..	24463b
24	1607	39.6	-12 42	8.9	9.0	A3	5	..	24340b	74	1603	39.9	-17 44	8.1	8.1	Ao	5	..	18975b
25	3022	39.6	-37 16	8.4	8.0	B9	3	1.8	18558b	75	4293	39.9	-23 19	9.5	9.4	K	1	..	20535b
26	2856	39.6	-38 51	9.0	8.6	Ao	5	0.2	20534b	76	3336	39.9	-26 27	10.9	10.5	Fo	1	..	24433b
27	2791	39.6	-39 9	10.2	9.8	A	2	..	20534b	77	3238	39.9	-27 29	7.36	7.5	Ao	8	..	20582b
28	2644	39.6	-40 45	9.0	8.9	F2	3	..	20556b	78	3465	39.9	-30 51	9.5	9.5	A	2	..	24433b
29	2634	39.6	-43 24	8.5	9.2	Ao	2	..	20556b	79	2697	39.9	-45 16	9.4	10.6	Ko	2	..	38414b
30	2691	39.6	-45 15	9.6	9.8	F8	4	..	38414b	80	1127	40.0	+52 22	8.9	9.7	G5	2	..	37419i
31	2617	39.6	-46 20	10.2	10.4	G5	1	..	38414b	81	1436	40.0	+48 53	5.28	6.28	Ko	8	R	37438i
32	751	39.6	-58 8	8.9	9.7	Ko	2	..	13007b	82	1222	40.0	+27 56	8.8	8.8	Ao	3	..	38185i
33	642	39.6	-70 0	..	10.7	Ro	..	..	M	83	1257	40.0	+10 29	8.7	8.7	A	1	..	38200i
34	398	39.6	-74 50	10.4	10.7	F	1	..	20652b	84	1376	40.0	+ 9 53	6.68	6.96	Fo	7	..	38200i
35	1235	39.7	+51 54	8.6	9.6	Ko	1	..	37419i	85	1395	40.0	+ 5 57	8.9	8.9	B9	3	..	12670b
36	1487	39.7	+35 9	8.8	8.9	A5	1	..	37527i	86	1744	40.0	- 2 46	8.9	8.9	B9	6	..	20867b
37	1396	39.7	+13 0	3.40	3.82	F5	..	R	1686c	87	1541	40.0	- 8 34	10.1	10.2	A2	4	..	24463b
38	1423	39.7	+ 4 21	8.1	9.1	Ko	4	0.4	38168i	88	1628	40.0	- 9 8	9.2	9.2	Ao	3	..	24463b
39	1359	39.7	- 1 31	9.6	9.9	F2	3	..	20867b	89	1629	40.0	- 9 17	8.1	8.9	G5	7	5.3	24463b
40	1711	39.7	- 6 10	9.2	9.6	F5	2	..	20803b	90	1630	40.0	- 9 33	9.2	9.7	F8	2	..	24746b
41	1609	39.7	-12 24	9.4	9.5	A2	2	..	24340b	91	..	40.0	-11 58	..	..	A2	2	..	24463b
42	4367	39.7	-24 54	9.90	10.4	Go	2	..	24433b	92	1610	40.0	-12 45	9.1	10.1	Ko	2	..	24463b
43	3398	39.7	-29 32	8.0	8.3	Fo	4	..	20582b	93	1517	40.0	-20 39	9.6	9.1	Ao	2	..	20535b
44	2619	39.7	-46 55	9.6	9.2	Fo	4	..	38414b	94	1514	40.0	-22 21	8.4	9.1	Ma	1	..	20535b
45	188	39.8	+82 23	8.8	9.9	K2	2	0.2	38330i	95	1512	40.0	-22 28	8.5	8.8	K2	3	..	20535b
46	1434	39.8	+48 20	8.2	8.3	A2	3	..	37438i	96	4298	40.0	-23 16	10.4	9.2	Go	1	..	20535b
47	1189	39.8	+46 12	9.4	10.4	Ko	1	..	5400m	97	2798	40.0	-39 5	6.30	7.2	A3	8	..	18558b
48	1602	39.8	+42 8	8.5	8.6	A2	4	E	37397i	98	2647	40.0	-40 6	9.0	9.5	A3	1	..	12657b
49	1707	39.8	+40 21	8.07	8.07	Ao	3	E	37397i	99	2698	40.0	-45 41	10.2	10.4	Fo	2	..	38414b
50	1309	39.8	+15 35	8.1	8.1	B9	2	E	37441i	100	101	40.1	+85 20	9.0	9.3	Fo	2	..	37546i

THE HENRY DRAPER CATALOGUE.

48800

6^h 40^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	999	40.1	+60 3	8.96	10.14	K5	2	..	37526i	51	1520	40.3	-20 19	9.0	8.8	A2	4	..	39936b
2	..	40.1	+43 56	..	..	G5	1	..	5400m	52	1574	40.3	-21 11	9.1	8.6	A2	5	..	20535b
3	..	40.1	+43 32	..	..	A2	2	..	5400m	53	1518	40.3	-22 41	9.2	9.1	F2	2	..	20535b
4	1501	40.1	+36 30	8.4	9.5	K2	1	..	38941i	54	3239	40.3	-27 19	10.4	10.2	Go	2	..	24433b
5	1491	40.1	+23 29	6.51	7.29	G5	8	..	37441i	55	2703	40.3	-45 8	10.9	10.6	Ao	2	..	38414b
6	1401	40.1	+13 43	9.6	9.6	Ao	2	..	38200i	56	2631	40.3	-47 1	9.6	9.5	Fo	5	..	38414b
7	1580	40.1	+0 4	6.92	6.87	B8	6	..	38196i	57	2357	40.3	-50 21	6.94	7.2	B5	4	3,10	9026b
8	1416	40.1	-0 54	7.7	7.7	B9	6	..	38196i	58	692	40.3	-60 35	8.1	8.1	F2	5	..	15147b
9	1777	40.1	-5 50	7.9	7.9	B8	7	0,7	20803b	59	467	40.4	+66 24	8.6	9.2	Go	5	..	37545i
10	1611	40.1	-12 32	10.1	10.7	Go	2	..	24463b	60	468	40.4	+66 2	9.4	9.5	A5	1	..	38155i
11	1635	40.1	-13 14	9.4	9.5	A2	3	..	24463b	61	1000	40.4	+60 18	8.7	8.7	Ao	3	..	38239i
12	1563	40.1	-14 37	8.7	9.1	F5	3	E	24340b	62	1128	40.4	+52 14	8.9	9.0	A3	3	..	37419i
13	1542	40.1	-19 34	7.64	7.7	A3	6	0,9-	39936b	63	1438	40.4	+48 8	8.0	9.1	K2	2	..	37438i
14	1516	40.1	-22 19	8.5	8.8	Ko	3	..	20535b	64	1338	40.4	+18 57	6.83	6.81	B9	7	..	37441i
15	2650	40.1	-40 49	7.5	9.0	K5	3	..	20556b	65	1424	40.4	+14 10	8.3	9.3	Ko	2	..	38200i
16	2534	40.1	-47 49	9.2	9.5	Ko	3	..	38414b	66	1378	40.4	+2 26	8.9	8.9	Ao	2	..	20708b
17	695	40.1	-63 1	9.5	9.8	Fo	4	..	15147b	67	1417	40.4	-0 21	8.9	9.0	A2	3	R	20867b
18	401	40.1	-74 12	9.5	9.6	A5	7	..	20652b	68	1618	40.4	-11 18	8.9	9.9	Ko	2	..	24340b
19	400	40.1	-74 42	9.2	10.2	Ko	4	..	20652b	69	1636	40.4	-13 16	8.7	9.9	K5	2	..	24340b
20	396	40.1	-75 34	9.6	10.2	Go	3	..	20652b	70	1605	40.4	-17 20	8.6	8.6	Ao	6	..	18975b
21	237	40.1	-78 24	10.0	10.6	Go	2	..	20652b	71	1536	40.4	-18 8	9.1	9.4	F2	2	..	18975b
22	128	40.1	-83 46	8.7	9.5	G5	4	..	20557b	72	1534	40.4	-18 57	7.16	7.16	Ao	6	..	8902b
23	544	40.2	+65 32	9.5	9.8	F	2	..	37545i	73	1522	40.4	-20 21	8.6	9.1	K5	2	..	39936b
24	1352	40.2	+45 10	10.2	11.3	K2	1	..	5400m	74	4311	40.4	-23 58	9.5	9.4	A	3	..	24433b
25	1598	40.2	+43 17	10.2	11.0	G5	1	..	5400m	75	2802	40.4	-39 45	7.6	7.9	Fo	5	5,3	20556b
26	1489	40.2	+35 5	8.42	8.92	F8	2	..	38941i	76	2466	40.4	-48 24	9.2	9.8	Go	3	..	38414b
27	1271	40.2	+16 24	8.2	8.2	Ao	3	..	37441i	77	473	40.4	-71 15	10.3	10.3	Ao	2	..	15167b
28	1376	40.2	+2 20	8.4	8.7	F2	2	..	38196i	78	453	40.5	+68 21	8.5	9.5	Ko	5	..	38155i
29	1362	40.2	-2 0	9.32	9.30	B9	4	..	20867b	79	454	40.5	+67 41	5.04	4.87	B3	..	..	56,83
30	1713	40.2	-6 8	9.8	9.8	B9	2	..	20803b	80	879	40.5	+62 1	9.5	9.5	A	1	..	37545i
31	1617	40.2	-11 42	9.2	9.7	F8	4	..	24340b	81	1605	40.5	+38 39	7.30	8.30	Ko	3	..	38408i
32	4304	40.2	-23 6	9.3	9.4	Ko	2	0,1	24433b	82	1493	40.5	+23 57	8.5	8.8	Fo	2	..	38185i
33	3343	40.2	-26 34	10.0	10.4	G5	1	..	24433b	83	1562	40.5	+20 49	8.0	8.0	B9	7	..	37441i
34	3348	40.2	-28 12	10.9	10.1	A2	2	..	24433b	84	1339	40.5	+18 19	8.1	8.2	A2	2	..	37441i
35	3321	40.2	-32 19	7.8	8.9	K5	2	..	18385b	85	1430	40.5	+4 8	9.3	10.1	G5	2	..	37652i
36	3029	40.2	-37 40	7.27	8.3	Ko	7	..	20534b	86	1364	40.5	-1 19	8.5	8.5	B9	4	..	38196i
37	2800	40.2	-39 16	8.4	8.3	Ao	5	0,3	20534b	87	1780	40.5	-5 12	9.6	10.0	F5	2	..	20803b
38	2356	40.2	-50 21	9.4	9.4	B9	3	..	38414b	88	..	40.5	-8 59	..	..	Ao	2	..	24746b
39	1143	40.2	-56 58	9.8	9.9	A5	2	..	13007b	89	1638	40.5	-13 7	9.1	9.5	F5	3	..	24340b
40	303	40.3	+74 14	7.6	8.4	G5	3	..	37343i	90	1537	40.5	-18 28	7.01	7.07	A2	5	..	8902b
41	1125	40.3	+55 22	8.8	8.8	Ao	4	..	38239i	91	3324	40.5	-32 12	8.7	8.4	Ao	5	E	18385b
42	1469	40.3	+22 41	9.0	10.0	Ko	1	..	38185i	92	2392	40.5	-49 51	10.9	10.0	F8	3	..	38414b
43	1275	40.3	+12 49	6.43	6.71	Fo	7	..	38200i	93	1001	40.6	+60 17	8.4	9.0	Go	4	..	37526i
44	1260	40.3	+10 52	8.5	9.5	Ko	1	..	38200i	94	1407	40.6	+33 54	8.4	9.2	G5	1	..	37527i
45	1429	40.3	+4 42	7.7	7.7	Ao	8	..	37652i	95	1345	40.6	+28 59	9.0	9.1	A2	2	E	38185i
46	1576	40.3	-3 50	9.0	9.1	A2	4	..	12671b	96	1724	40.6	-7 2	9.1	9.9	G5	3	..	20895b
47	1548	40.3	-7 47	9.6	9.6	Ao	4	..	24463b	97	1636	40.6	-9 53	8.5	8.5	Ao	4	..	24340b
48	1547	40.3	-7 53	10.3	10.3	Ao	3	..	24463b	98	1678	40.6	-10 45	9.1	9.1	Ao	1	..	24340b
49	1631	40.3	-9 10	9.6	9.7	A2	2	..	24463b	99	1639	40.6	-13 26	9.6	10.7	K2	1	..	24463b
50	1604	40.3	-18 0	8.9	9.5	Go	3	..	18975b	100	1590	40.6	-16 56	8.7	8.8	A2	3	..	18975b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

48900

6^h 40^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3242	m. 40.6	° -27 28	10.7	9.7	A2	3	..	24433b	51	1226	m. 41.0	° +27 14	8.2	9.2	Ko	2	..	38185i
2	3243	40.6	-27 29	10.9	9.7	Ao	3	..	24433b	52	1351	41.0	+26 41	8.6	8.9	Fo	2	..	38185i
3	3480	40.6	-30 4	8.57	8.6	G5	2	..	20582b	53	1273	41.0	+16 52	6.68	7.10	F5	8	R	37441i
4	2654	40.6	-40 53	9.4	9.2	Go	2	..	20556b	54	1400	41.0	+16 52	8.9	8.9	A5	3	..	37652i
5	2644	40.6	-43 57	7.6	8.6	A2	6	..	20556b	55	1380	41.0	+ 5 49	8.1	8.1	B8	3	..	37652i
6	2633	40.6	-46 51	9.2	9.2	Ao	5	..	38414b	56	1587	41.0	+ 2 45	7.99	7.97	B9	3	..	38196i
7	2469	40.6	-48 7	7.5	8.8	Ko	7	..	38414b	57	1369	41.0	+ 0 51	8.4	9.4	B9	5	..	20867b
8	2468	40.6	-48 45	8.5	9.4	Ko	3	..	38414b	58	1581	41.0	- 1 35	8.9	8.9	Ko	3	..	12671b
9	403	40.6	-74 18	10.1	10.7	G	1	..	20652b	59	1786	41.0	- 3 42	9.1	10.1	Ao	4	..	20803b
10	238	40.6	-78 45	10.2	11.3	K2	1	..	20652b	60	1545	41.0	- 5 42	10.1	11.3	Ko	2	5,1	24746b
11	1002	40.7	+60 36	8.6	9.6	Ko	5	..	37526i	61	1682	41.0	- 8 56	9.1	9.1	K5	1	..	24340b
12	1329	40.7	+30 23	var.	var.	Md	..	R	56,200	62	1619	41.0	-10 33	9.6	10.6	Ao	2	..	24463b
13	1494	40.7	+23 48	8.2	8.6	F5	3	..	37441i	63	1618	41.0	-12 13	9.6	9.6	Ko	1	..	24463b
14	1379	40.7	+ 2 37	7.5	7.4	B5	6	..	37652i	64	1532	41.0	-12 32	10.1	9.2	Ao	4	..	24463b
15	1591	40.7	-16 35	-1.58	-1.58	Ao	..	R	28,199	65	4393	41.0	-20 25	9.5	10.5	Ao	2	..	39936b
16	4317	40.7	-23 45	8.7	8.8	Ko	4	..	20535b	66	3572	41.0	-24 30	9.2	9.0	K2	2	..	24433b
17	3484	40.7	-30 58	5.16	4.99	B3p	..	0,8R	56,122	67	3251	41.0	-25 43	8.7	9.9	Ao	3	..	20582b
18	2471	40.7	-48 21	9.0	8.6	F5	6	..	38414b	68	2700	41.0	-27 9	8.6	8.9	K5	2	..	24433b
19	2047	40.7	-51 41	9.6	9.7	F8	4	..	38414b	69	2547	41.0	-42 37	10.5	10.7	G5	2	..	20556b
20	604	40.7	-64 15	8.3	8.9	Go	4	0,4	15176b	70	1047	41.0	-47 45	7.7	8.0	Go	1	..	38414b
21	1504	40.8	+36 46	8.02	8.08	A2	4	E	37527i	71	407	41.0	-55 55	10.5	10.8	Ao	6	..	13007b
22	1421	40.8	- 0 36	6.69	6.69	Ao	8	..	38196i	72	408	41.0	-76 20	9.2	10.2	F2	1	..	20652b
23	1538	40.8	-18 10	7.00	7.78	G5	2	..	8902b	73	172	41.0	-76 43	8.6	9.4	Ko	4	..	20652b
24	1526	40.8	-20 23	9.2	8.8	A2	3	..	39936b	74	1129	41.1	+83 45	9.2	9.6	G5	2	..	37546i
25	2472	40.8	-48 31	9.2	11.2	G5	1	..	38414b	75	1382	41.1	+52 52	7.4	8.6	F5	1	..	37419i
26	2364	40.8	-50 33	9.2	10.0	Ko	3	..	38414b	76	1486	41.1	+ 9 18	5.84	5.67	K5	1	..	38200i
27	759	40.8	-58 5	8.7	9.0	F8	3	..	13007b	77	1728	41.1	+ 8 42	8.1	8.1	B3	8	0,8	38200i
28	760	40.8	-58 37	9.2	10.2	Ko	1	..	13007b	78	1551	41.1	- 6 48	6.89	6.89	Ao	8	..	20895b
29	1535	40.9	+44 41	9.7	10.9	K5	1	..	5400m	79	1550	41.1	- 7 14	9.8	9.8	Ao	10	..	20895b
30	1350	40.9	+26 25	8.7	9.8	K2	1	..	38185i	80	1623	41.1	- 7 37	9.2	8.8	B9	3	..	24463b
31	1406	40.9	+13 45	9.1	9.2	A2	2	..	38200i	81	1533	41.1	-11 54	8.6	8.0	K5	1	..	24463b
32	1394	40.9	+ 3 11	8.9	8.9	Ao	2	..	37652i	82	1535	41.1	-20 20	9.0	7.9	Ao	3	..	39936b
33	1367	40.9	- 1 9	9.3	9.4	A2	2	..	38196i	83	1534	41.1	-20 44	8.7	8.3	Ao	6	..	39936b
34	1368	40.9	- 1 20	9.6	9.6	B8	3	..	20867b	84	3117	41.1	-20 52	9.0	8.6	Ao	4	..	39936b
35	1549	40.9	- 7 49	10.1	10.1	Ao	4	..	24463b	85	3036	41.1	-36 21	8.7	8.6	A2	3	..	20534b
36	1568	40.9	-14 25	9.4	10.2	G5	1	E	24463b	86	3035	41.1	-37 42	9.6	9.6	Go	6	..	20534b
37	1569	40.9	-14 51	8.9	9.9	Ko	3	E	24463b	87	2808	41.1	-37 57	9.8	10.9	F8	5	..	20534b
38	3248	40.9	-27 14	6.43	7.1	F8	10	..	20582b	88	2397	41.1	-39 34	7.9	8.9	Ko	3	..	38414b
39	3367	40.9	-28 17	10.0	10.2	G5	1	..	24433b	89	605	41.1	-49 1	9.5	9.5	Ko	1	..	15223b
40	3369	40.9	-28 47	7.9	8.4	Fo	4	..	20582b	90	643	41.1	-64 31	8.6	9.6	Ko	4	5,3	18485b
41	3368	40.9	-28 57	9.5	9.3	A2	2	..	20582b	91	1130	41.1	-65 52	9.0	10.1	Ao	2	..	37419i
42	3114	40.9	-36 12	8.7	9.2	G5	2	..	20534b	92	1234	41.2	+52 36	8.7	9.5	K2	1	..	38185i
43	2806	40.9	-39 51	9.0	9.2	A2	2	..	20556b	93	1473	41.2	+28 17	7.02	8.02	Ao	6	..	37441i
44	2546	40.9	-47 53	9.4	10.4	Ko	2	..	38414b	94	1567	41.2	+22 18	8.8	8.8	Ko	2	..	37441i
45	1088	40.9	-55 1	7.88	7.2	B8	7	..	13007b	95	1589	41.2	+20 53	9.1	9.1	G5	5	..	20867b
46	691	40.9	-59 31	9.6	9.6	Ao	1	..	15176b	96	1754	41.2	+ 0 12	10.1	10.1	Ao	4	..	20867b
47	702	40.9	-62 1	8.8	9.9	K5	2	..	15147b	97	1788	41.2	- 2 17	6.78	6.76	B9	4	..	20895b
48	1003	41.0	+60 27	8.7	9.7	K	2	..	37526i	98	1611	41.2	- 5 22	9.05	8.5	Ao	2	..	18975b
49	1353	41.0	+45 54	10.2	10.7	F8	1	..	5400m	99	1538	41.2	-17 4	9.05	8.5	Ao	9	..	39936b
50	1410	41.0	+33 13	8.6	8.6	Ao	2	..	37527i	100									

THE HENRY DRAPER CATALOGUE.

49000

6^h 41^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	4325	41.2	-23 22	6.23	7.3	Ko	9	..	20535b	51	4409	41.4	-24 4	8.7	8.7	Ao	6	0,8	20535b
2	3574	41.2	-25 32	8.7	7.9	B8	6	..	20582b	52	4406	41.4	-24 47	9.5	9.4	F8	3	..	24433b
3	2871	41.2	-38 20	9.0	10.1	Ko	2	..	20534b	53	3083	41.4	-35 2	8.20	8.0	Ao	8	..	20534b
4	2477	41.2	-48 35	9.2	9.7	Fo	4	..	38414b	54	986	41.4	-52 55	8.7	10.3	Mb	2	E	38414b
5	2053	41.2	-51 15	10.0	10.3	F8	3	..	38414b	55	1599	41.5	+43 9	9.5	10.0	F8	3	..	5400m
6	644	41.2	-65 21	7.8	8.1	F2	4	..	18485b	56	1412	41.5	+33 9	9.0	9.0	A	2	..	37527i
7	422	41.3	+70 22	9.5	9.6	A2	2	..	38155i	57	1414	41.5	+31 8	7.8	7.9	A2	3	..	37527i
8	1237	41.3	+51 30	9.2	9.2	Ao	2	..	37419i	58	1348	41.5	+18 25	7.5	7.6	A2	6	..	37441i
9	1513	41.3	+41 25	8.0	9.1	K2	2	..	38941i	59	1349	41.5	+18 18	6.16	6.16	Ao	9	..	37441i
10	1514	41.3	+41 12	9.0	9.0	Ao	1	..	38941i	60	1285	41.5	+12 12	8.4	8.8	F5	1	..	38200i
11	1413	41.3	+31 48	7.99	8.49	F8	3	..	37527i	61	1302	41.5	+11 9	8.1	8.2	A5	4	..	38200i
12	1355	41.3	+26 13	8.6	8.6	Ao	3	..	38185i	62	1402	41.5	+5 20	8.5	9.5	Ko	2	..	37652i
13	1392	41.3	+17 13	7.43	7.41	B9	6	..	37441i	63	1440	41.5	+4 28	8.3	9.1	G5	2	..	37652i
14	1262	41.3	+10 50	7.40	7.38	B9	6	..	38200i	64	1372	41.5	-2 1	9.17	9.17	Ao	4	..	20867b
15	1487	41.3	+8 27	7.5	7.8	Fo	5	..	37652i	65	1757	41.5	-2 11	10.1	10.2	A2	2	..	20867b
16	1490	41.3	+7 59	8.2	8.2	B8	4	..	12670b	66	1584	41.5	-3 7	9.4	9.4	Ao	2	..	20867b
17	1385	41.3	+2 25	8.9	9.9	Ko	1	..	20708b	67	1641	41.5	-13 44	8.9	8.8	B5	4	..	24340b
18	1790	41.3	-5 4	8.85	9.63	G5	2	..	20895b	68	1549	41.5	-20 45	7.50	8.6	K2	4	..	39936b
19	1791	41.3	-5 8	7.80	8.98	K5	4	..	20895b	69	1552	41.5	-20 46	9.0	9.7	Ao	5	..	39936b
20	1792	41.3	-5 23	9.1	9.1	Ao	3	..	20895b	70	3256	41.5	-27 5	9.7	9.9	Fo	2	..	24433b
21	1546	41.3	-8 33	10.1	10.2	A2	3	..	24746b	71	3255	41.5	-27 18	10.2	10.1	G5	1	..	24433b
22	1544	41.3	-20 25	9.4	8.8	Ao	3	..	39936b	72	3378	41.5	-28 19	9.0	10.1	Ko	2	..	24433b
23	1543	41.3	-20 35	8.9	8.5	A	4	R	39936b	73	3124	41.5	-36 40	10.9	10.1	F5	1	..	20534b
24	1546	41.3	-20 35	8.3	8.8	Ao	4	..	39936b	74	2640	41.5	-46 58	8.3	8.9	G5	6	..	38414b
25	1545	41.3	-20 43	9.1	8.8	A	2	..	39936b	75	1150	41.5	-56 29	8.8	10.1	G5	1	..	13007b
26	4328	41.3	-23 28	9.0	9.1	Ko	6	5,3	24433b	76	706	41.5	-61 40	7.12	7.6	F5	10	..	15147b
27	3369	41.3	-26 3	9.2	9.6	G5	2	..	24433b	77	627	41.5	-63 36	9.6	9.9	F	2	..	15176b
28	3495	41.3	-30 29	6.47	6.7	B5	..	3,2	56,122	78	608	41.5	-64 26	8.3	8.6	Fo	6	5,5	15223b
29	3634	41.3	-31 34	7.25	7.7	Ao	5	..	18385b	79	549	41.5	-70 13	8.9	10.3	Ma	..	..	M
30	3121	41.3	-36 33	9.0	8.6	A2	5	..	20534b	80	518	41.5	-72 55	9.6	10.0	F5	2	..	20652b
31	1049	41.3	-55 1	9.18	10.1	G5	1	..	13007b	81	1155	41.6	+56 40	9.5	9.6	A3	2	E	37526i
32	1050	41.3	-55 7	8.63	8.7	F5	4	..	13007b	82	1069	41.6	+53 9	7.8	8.1	Fo	7	..	37419i
33	1149	41.3	-56 36	9.4	10.4	Ko	1	..	13007b	83	1600	41.6	+43 57	8.0	8.4	F5	7	3,4	5400m
34	762	41.3	-58 22	8.2	9.3	K5	4	..	13007b	84	1491	41.6	+35 21	8.0	8.0	B9	4	..	37527i
35	704	41.3	-61 7	8.2	9.6	G5	4	..	15147b	85	1230	41.6	+27 1	9.8	9.8	A	1	..	38185i
36	189	41.3	-80 22	9.8	9.8	B9	3	..	20557b	86	1395	41.6	+17 4	7.7	8.8	K2	2	..	37441i
37	98	41.3	-87 58	9.5	10.5	Ko	2	..	15145b	87	1426	41.6	-0 45	8.9	9.0	A2	3	..	20867b
38	603	41.4	+64 28	8.4	8.4	B9	7	..	37545i	88	1575	41.6	-14 12	9.1	9.1	Ao	5	..	24340b
39	910	41.4	+61 4	8.6	9.4	G5	4	..	37526i	89	1504	41.6	-15 29	8.6	8.6	B9	5	..	18975b
40	1516	41.4	+41 5	8.6	8.6	A	1	..	38941i	90	1541	41.6	-18 26	9.0	10.1	K2	1	..	18975b
41	1332	41.4	+30 13	8.01	8.79	G5	2	..	37527i	91	1555	41.6	-20 41	7.4	8.3	K2	4	..	39936b
42	1393	41.4	+17 2	7.7	8.1	F5	4	..	37441i	92	1579	41.6	-21 37	9.6	8.8	Ao	2	..	20535b
43	1492	41.4	+7 59	8.9	9.3	F5	2	0,2	12670b	93	3370	41.6	-26 4	9.7	10.1	Ko	1	..	24433b
44	1398	41.4	+3 45	8.8	9.3	F8	3	..	37652i	94	3371	41.6	-26 13	10.0	10.1	F5	2	..	24433b
45	1683	41.4	-10 12	9.2	9.2	Ao	2	..	24746b	95	3640	41.6	-31 41	5.92	6.8	F8	..	3,3	56,122
46	1572	41.4	-14 23	8.7	9.1	F5	4	..	24340b	96	2369	41.6	-50 25	9.1	8.6	A3	6	..	38414b
47	1574	41.4	-14 36	9.1	10.3	K5	2	E	24463b	97	409	41.6	-76 26	9.7	10.7	Ko	1	..	20652b
48	1573	41.4	-14 42	5.30	5.36	A2	..	0,8	56,83	98	1522	41.7	+41 11	9.2	9.2	Ao	1	..	38941i
49	1548	41.4	-20 35	9.1	8.0	Ao	3	..	39936b	99	1458	41.7	+34 2	9.5	9.5	Ao	3	..	37527i
50	1551	41.4	-20 58	8.4	9.1	K5	3	..	39936b	100	1406	41.7	+32 0	8.8	8.8	Ao	2	..	37527i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

49100

6^h41^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1303	41.7	+11 1	8.5	9.1	Go	1	..	38200i	51	1562	41.9	-20 42	8.9	8.2	A	4	..	39936b
2	1494	41.7	+ 8 15	8.7	9.5	G5	2	..	1267ob	52	3593	41.9	-25 5	9.5	9.6	Fo	2	..	24433b
3	1504	41.7	+ 1 37	9.3	9.3	A	3	E	20867b	53	3088	41.9	-34 35	10.0	9.2	Ao	2	..	20534b
4	1577	41.7	-14 49	9.4	9.4	Ao	3	E	24463b	54	3044	41.9	-37 30	9.4	9.2	A5	4	..	20534b
5	1557	41.7	-20 30	8.3	8.8	Ko	3	..	39936b	55	2882	41.9	-38 40	9.4	9.2	F2	3	..	20534b
6	1556	41.7	-20 37	10.1	8.3	Ao	3	..	39936b	56	410	41.9	-76 39	9.9	10.5	Go	2	..	20652b
7	4334	41.7	-23 21	10.2	9.4	Ko	4	..	24433b	57	271	41.9	-77 36	9.2	10.0	G5	4	..	20652b
8	3585	41.7	-25 37	10.7	9.6	A2	3	..	24433b	58	882	42.0	+62 22	8.7	9.3	Go	3	..	37545i
9	3641	41.7	-31 23	8.7	9.0	A5	3	E	24433b	59	1351	42.0	+29 17	8.2	9.4	K5	1	E	38185i
10	3113	41.7	-35 5	9.50	9.5	Ao	2	..	20534b	60	1320	42.0	+15 49	9.3	9.3	A	1	..	37441i
11	1092	41.7	-54 4	8.7	8.3	Ao	5	..	13007b	61	1496	42.0	+ 8 9	5.00	6.00	Ko	9	..	37652i
12	697	41.7	-62 41	8.9	9.0	A5	5	..	15147b	62	1406	42.0	+ 5 35	8.1	8.9	G5	4	..	37652i
13	404	41.7	-74 20	10.0	10.8	G5	2	..	20652b	63	1506	42.0	+ 1 37	8.9	10.3	Ma	1	..	20708b
14	398	41.7	-75 42	10.0	10.4	F5	3	..	20652b	64	1428	42.0	- 0 53	9.1	9.1	B9	4	..	20867b
15	661	41.8	+63 11	9.2	9.8	G	2	..	37545i	65	1645	42.0	- 9 3	8.5	9.3	G5	3	..	20895b
16	1008	41.8	+57 0	8.4	9.4	Ko	2	..	37526i	66	1598	42.0	-16 56	8.5	9.5	Ko	2	..	18975b
17	1076	41.8	+54 22	8.9	8.9	Ao	2	..	38239i	67	3595	42.0	-25 9	9.55	10.1	Ko	2	..	24433b
18	..	41.8	+46 17	..	..	G	1	..	5400m	68	3379	42.0	-26 36	9.2	9.7	Ko	3	..	24433b
19	1717	41.8	+40 50	7.8	8.8	Ko	3	..	38941i	69	3130	42.0	-36 44	7.6	8.0	Ao	8	2,3	20534b
20	1383	41.8	+21 48	7.6	9.0	Ma	5	..	37441i	70	2646	42.0	-46 47	9.8	10.4	G5	2	..	38414b
21	1734	41.8	- 6 28	8.5	8.5	B9	7	..	20895b	71	1056	42.0	-55 6	8.93	10.1	Ko	1	..	13007b
22	1557	41.8	- 7 49	9.1	9.1	Ao	4	..	20895b	72	647	42.0	-66 0	9.0	9.3	Fo	3	..	18485b
23	1549	41.8	- 8 49	6.79	6.77	B9	10	..	20895b	73	189	42.1	+82 44	9.5	9.6	A2	3	..	37546i
24	1542	41.8	-18 25	8.7	9.8	K2	2	..	18975b	74	912	42.1	+61 1	8.7	9.7	Ko	5	..	37526i
25	1549	41.8	-19 18	8.5	8.5	Ao	4	..	18975b	75	1191	42.1	+46 47	9.9	11.1	K5	1	..	5400m
26	1560	41.8	-20 39	8.0	7.7	Ao	6	..	39936b	76	1355	42.1	+45 27	10.2	10.3	A3	2	..	5400m
27	1523	41.8	-22 58	9.2	9.4	A	2	..	24433b	77	..	42.1	+44 17	..	..	A	1	..	5400m
28	4340	41.8	-23 9	10.0	8.6	A2	4	..	20535b	78	1587	42.1	+37 37	7.72	8.28	Go	3	E	37527i
29	3590	41.8	-25 47	10.2	9.6	A2	3	..	24433b	79	1436	42.1	+14 54	8.27	9.27	Ko	1	..	38200i
30	3259	41.8	-27 49	10.7	10.1	G	1	..	24433b	80	1430	42.1	- 1 1	9.9	9.9	Ao	2	..	20867b
31	3505	41.8	-30 51	5.91	6.1	B3	..	0,6	56,122	81	1546	42.1	-18 31	8.9	9.9	Ko	3	..	18975b
32	2723	41.8	-45 27	8.9	9.9	Ko	3	..	38414b	82	1545	42.1	-18 33	9.2	9.2	Ao	3	..	18975b
33	2643	41.8	-46 40	7.1	8.9	K2	5	..	38414b	83	1551	42.1	-19 46	6.88	7.9	Ko	7	0,9	39936b
34	1093	41.8	-54 28	8.6	8.9	G5	3	..	13007b	84	1565	42.1	-20 35	9.8	8.8	Ao	3	..	39936b
35	589	41.8	-66 51	9.2	10.3	K2	1	..	15223b	85	1564	42.1	-20 44	9.8	8.8	Ao	2	..	39936b
36	1070	41.9	+53 54	8.6	9.8	K5	1	..	37419i	86	3600	42.1	-25 15	8.20	8.7	Fo	5	..	20582b
37	1345	41.9	+47 22	9.0	9.0	Ao	2	..	37438i	87	3262	42.1	-27 11	9.3	9.0	B9	4	..	20582b
38	1719	41.9	+40 42	8.5	8.6	A2	2	..	38941i	88	3397	42.1	-28 43	7.27	7.8	B5	8	..	20582b
39	1462	41.9	+34 13	7.9	8.0	A2	4	..	37527i	89	3513	42.1	-30 22	10.2	9.8	A2	3	..	24433b
40	1414	41.9	+33 55	8.1	8.9	G5	4	..	37527i	90	3050	42.1	-37 11	9.1	9.2	A5	3	..	20534b
41	1358	41.9	+26 49	9.0	9.0	Ao	2	..	38185i	91	2058	42.1	-51 13	9.8	10.3	K5	2	..	38414b
42	1404	41.9	+24 15	8.7	8.7	Ao	3	..	38185i	92	1096	42.1	-54 38	6.79	7.1	Ao	5	..	42927b
43	1374	41.9	- 1 6	9.6	9.6	Ao	2	..	20867b	93	648	42.1	-65 39	8.6	8.6	B9	4	..	18485b
44	1762	41.9	- 2 37	9.1	9.1	Ao	5	..	20867b	94	552	42.1	-70 34	7.0	7.1	A5	4	2,8	9062b
45	1797	41.9	- 6 3	7.9	7.9	Ao	7	..	20895b	95	411	42.1	-76 50	9.6	9.9	F2	5	..	20652b
46	1559	41.9	- 7 19	9.8	9.9	A2	2	..	20895b	96	1010	42.2	+57 19	8.6	9.4	G5	2	..	37526i
47	1644	41.9	-10 1	5.54	5.54	Ao	..	0,10	56,83	97	1601	42.2	+43 51	7.6	8.0	F5	7	3,9	37438i
48	1579	41.9	-14 26	6.54	6.62	A3	..	1,4	56,83	98	1611	42.2	+38 23	8.7	8.7	Ao	2	..	38941i
49	1550	41.9	-19 42	9.1	9.1	A2	2	..	39936b	99	1588	42.2	+37 5	7.88	7.96	A3	4	E	37527i
50	1563	41.9	-20 39	9.1	8.3	Ao	5	..	39936b	100	1416	42.2	+31 22	8.6	8.9	F2	2	..	37527i

THE HENRY DRAPER CATALOGUE.

49200

6^h 42^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1499	42.2	+ 23 21	8.0	8.8	G5	3	..	37441i	51	1562	42.4	- 7 23	9.8	9.9	A2	1	..	20895b
2	1393	42.2	+ 2 45	8.5	8.9	F5	2	..	37652i	52	1690	42.4	-10 38	9.1	9.2	A2	2	..	24340b
3	1395	42.2	+ 2 10	9.1	9.1	B9	3	..	37652i	53	1587	42.4	-15 0	9.26	10.33	K2	2	E	24463b
4	1764	42.2	- 2 44	9.2	9.3	A3	4	..	20867b	54	4422	42.4	-24 2	8.1	8.1	B9	8	..	20535b
5	1551	42.2	- 8 19	8.5	8.5	B8	8	..	20895b	55	3606	42.4	-25 28	9.7	9.6	A3	3	..	24433b
6	1617	42.2	-17 59	10.1	10.2	A3	1	..	18975b	56	3605	42.4	-25 54	9.5	9.1	A5	3	..	20582b
7	1548	42.2	-18 9	9.0	9.0	A0	2	..	18975b	57	3403	42.4	-28 6	7.9	9.3	Ma	2	..	20582b
8	1547	42.2	-18 38	9.1	9.2	A5	3	..	18975b	58	3452	42.4	-29 28	6.91	7.6	G5	8	..	20582b
9	1552	42.2	-19 5	9.4	9.4	A2	1	..	18975b	59	2657	42.4	-46 45	7.4	7.0	B8	2	5,10	9026b
10	1554	42.2	-20 1	9.4	9.7	G5	1	..	39936b	60	2561	42.4	-47 8	7.28	6.9	B3	2	0,10	8969b
11	1570	42.2	-20 37	9.6	9.1	A0	3	..	39936b	61	2376	42.4	-50 28	9.6	8.8	B8	5	..	38414b
12	1568	42.2	-20 43	8.1	8.8	K2	4	..	39936b	62	2375	42.4	-50 52	10.0	10.9	Ma	1	..	38414b
13	3450	42.2	-29 9	9.3	9.8	G5	1	..	20582b	63	2060	42.4	-51 30	9.4	10.3	K0	2	..	38414b
14	3449	42.2	-29 45	10.2	11.0	K0	1	..	24433b	64	1044	42.4	-57 18	9.5	10.1	Go	2	..	13007b
15	3053	42.2	-37 40	9.4	9.5	F8	2	..	20534b	65	765	42.4	-58 38	9.2	10.2	K0	1	..	13007b
16	2665	42.2	-43 46	9.2	8.9	F2	3	..	20556b	66	703	42.4	-62 31	8.6	9.6	K0	3	..	15147b
17	2652	42.2	-46 14	9.2	8.8	F0	4	..	38414b	67	475	42.4	-71 2	8.5	9.5	K0	4	..	15167b
18	2407	42.2	-49 40	10.2	10.3	F0	2	..	38414b	68	476	42.4	-71 41	6.43	7.8	K0	10	..	15167b
19	1097	42.2	-54 36	6.60	6.6	A0	5	..	13007b	69	971	42.5	+58 32	8.0	8.1	A3	8	..	37526i
20	1153	42.2	-56 19	9.5	9.5	A0	3	..	13007b	70	1346	42.5	+47 8	8.0	9.2	K5	1	..	37438i
21	218	42.3	+79 6	9.4	9.5	A2	3	0,2	38330i	71	1357	42.5	+45 49	8.9	9.7	G5	4	0,2	5400m
22	1477	42.3	+22 27	8.6	9.7	K2	1	..	38185i	72	1603	42.5	+43 41	9.9	10.7	G5	1	..	5400m
23	1453	42.3	+ 7 26	8.9	8.9	A0	3	..	37652i	73	1446	42.5	+ 4 33	7.9	9.0	K2	3	..	37652i
24	1600	42.3	+ 0 48	8.34	8.40	A2	3	E	37652i	74	1623	42.5	-12 5	7.7	8.7	K0	6	..	24340b
25	1378	42.3	- 1 12	8.7	8.7	A0	5	..	12671b	75	1624	42.5	-12 45	9.1	9.1	A0	1	..	24340b
26	1800	42.3	- 5 31	9.1	9.5	F5	4	..	20895b	76	1646	42.5	-13 4	9.1	9.2	A2	2	..	24340b
27	1553	42.3	- 8 55	9.1	9.2	A5	2	..	20895b	77	1572	42.5	-20 42	10.5	9.7	A	1	..	39936b
28	1631	42.3	-11 58	10.1	10.1	A	1	..	24340b	78	4423	42.5	-24 38	9.5	9.7	G5	2	..	24433b
29	1584	42.3	-14 20	5.19	5.14	B8	..	0,9	56,83	79	3610	42.5	-25 7	9.85	9.7	Go	2	..	24433b
30	1619	42.3	-17 35	8.7	9.8	K2	1	..	18975b	80	3409	42.5	-28 9	11.8	10.4	A	1	..	24433b
31	1620	42.3	-17 39	9.1	10.1	K0	1	..	18975b	81	3058	42.5	-37 19	8.4	8.6	F0	5	2,2	20534b
32	1549	42.3	-19 0	9.4	9.8	F5	1	..	18975b	82	2714	42.5	-42 26	8.9	9.2	F0	3	..	20556b
33	1527	42.3	-23 3	8.3	7.9	B5	8	..	20535b	83	2658	42.5	-46 36	9.1	8.5	B9	6	..	38414b
34	2656	42.3	-46 50	7.7	7.1	B8	8	1,1	38414b	84	994	42.5	-52 20	8.0	8.2	A0	3	..	10697b
35	2485	42.3	-48 37	9.6	9.4	F5	4	..	38414b	85	628	42.5	-63 2	8.3	9.3	K0	4	..	15147b
36	2374	42.3	-51 0	8.6	10.6	K5	3	..	38414b	86	272	42.5	-77 27	8.6	10.0	Mb	4	..	20652b
37	1011	42.4	+57 45	8.2	9.0	G5	3	..	37526i	87	1023	42.6	+59 12	9.4	10.6	K5	1	..	38239i
38	1356	42.4	+45 35	9.7	10.7	K0	2	..	5400m	88	1192	42.6	+46 17	7.30	8.30	K0	5	2,7	37438i
39	1538	42.4	+44 9	9.5	9.6	A2	5	..	5400m	89	1723	42.6	+40 17	8.12	8.68	Go	3	..	38941i
40	1406	42.4	+24 28	8.0	8.5	F8	1	..	38185i	90	1445	42.6	+14 42	7.49	7.49	A0	4	E	37441i
41	1574	42.4	+20 12	9.0	9.0	A0	2	..	37441i	91	1385	42.6	+ 6 52	7.8	8.8	K0	3	..	37652i
42	1441	42.4	+14 22	8.8	8.8	A0	3	..	38200i	92	1406	42.6	+ 3 2	8.3	9.7	Ma	2	..	37652i
43	1307	42.4	+11 35	7.9	7.9	A0	5	..	38200i	93	1397	42.6	+ 2 31	4.70	5.70	K0	..	..	56,83
44	1500	42.4	+ 8 8	8.9	8.9	A	6	R	12670b	94	1604	42.6	+ 0 27	6.90	6.96	A2	6	E	37652i
45	1501	42.4	+ 7 59	7.8	7.8	A0	5	..	37652i	95	1556	42.6	- 8 29	9.4	10.0	Go	1	..	20895b
46	1384	42.4	+ 6 25	8.5	8.5	B9	5	..	37652i	96	1649	42.6	- 9 51	8.5	9.9	Ma	3	..	20895b
47	..	42.4	+ 0 48	..	..	Pec.	..	R	M	97	1647	42.6	-13 23	9.0	10.0	K0	2	E	24463b
48	1431	42.4	- 1 2	8.9	9.5	Go	2	..	20867b	98	1550	42.6	-18 41	8.7	9.7	K0	3	..	18975b
49	1766	42.4	- 2 19	9.0	9.1	A2	5	..	20867b	99	1573	42.6	-20 33	10.5	9.7	A	1	..	39936b
50	1803	42.4	- 5 53	8.9	9.9	K0	2	..	20895b	100	3613	42.6	-25 43	10.7	9.7	A5	2	..	24433b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

49300

6^h 42^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3520	42.6	-30 39	7.5	8.3	F8	4	..	20582b	51	1590	42.9	-21 34	9.2	8.8	A2	4	..	20535b
2	3095	42.6	-34 9	6.91	7.2	Ao	9	..	20534b	52	3414	42.9	-28 3	9.2	10.2	Ko	2	..	24433b
3	3061	42.6	-37 24	10.4	9.8	Ao	2	..	20534b	53	3415	42.9	-28 56	8.1	8.5	A2	6	..	20582b
4	3060	42.6	-38 1	10.9	10.1	A2	2	..	20534b	54	2721	42.9	-42 48	9.1	9.0	F2	3	..	20556b
5	2491	42.6	-48 42	10.2	10.6	Ao	2	..	38414b	55	2732	42.9	-45 54	8.8	9.1	G5	4	..	38414b
6	645	42.6	-67 45	6.86	6.6	Ao	4	..	9003b	56	2663	42.9	-46 50	8.5	9.4	Ko	3	..	38414b
7	399	42.6	-75 25	9.2	9.3	A2	6	..	20652b	57	2061	42.9	-51 28	9.1	8.3	A5	5	..	38414b
8	353	42.7	+73 32	8.5	8.6	A2	3	..	37343i	58	593	42.9	-66 7	10.0	10.1	A2	1	..	15223b
9	1539	42.7	+44 37	9.7	9.8	A2	3	3,1	5400m	59	649	42.9	-69 37	7.6	7.6	Ao	9	..	15168b
10	1270	42.7	+10 17	9.1	9.1	Ao	2	..	38200i	60	458	43.0	+67 20	8.0	8.1	A2	4	..	37545i
11	1433	42.7	- 0 45	8.3	8.3	B8	5	..	20867b	61	1077	43.0	+54 32	7.91	8.41	F8	4	3,5	38239i
12	1379	42.7	- 1 15	8.9	8.9	B9	4	..	20867b	62	1540	43.0	+44 1	9.5	10.3	G5	3	..	5400m
13	1564	42.7	- 7 59	9.2	9.3	A2	3	..	20895b	63	1532	43.0	+41 6	9.0	9.0	Ao	2	..	38941i
14	1627	42.7	-12 25	9.8	9.8	A	2	E	24463b	64	1592	43.0	+37 38	6.60	7.78	K5	5	E	37527i
15	1511	42.7	-15 58	7.54	7.42	B5	8	..	18975b	65	1247	43.0	+28 39	8.2	9.0	G5	2	..	38185i
16	1624	42.7	-17 58	9.1	10.1	Ko	1	..	18975b	66	1578	43.0	+20 40	7.45	7.40	B8	7	..	37441i
17	1575	42.7	-20 34	8.4	8.6	F8	4	..	39936b	67	1389	43.0	+ 6 19	7.7	8.5	G5	4	..	37652i
18	3615	42.7	-25 4	9.00	9.1	G5	2	..	20582b	68	1414	43.0	+ 5 39	8.5	9.9	Ma	2	..	37652i
19	2831	42.7	-39 26	6.53	6.5	B8	7	..	18558b	69	1664	43.0	- 4 9	7.9	8.0	A3	7	..	12671b
20	2565	42.7	-47 4	10.5	9.8	Ao	2	..	38414b	70	1665	43.0	- 5 3	7.45	7.40	B8	8	..	12671b
21	413	42.7	-76 25	10.1	10.4	F2	3	..	20652b	71	1629	43.0	-12 23	9.4	10.4	Ko	2	E	24463b
22	392	42.8	+69 35	9.4	10.4	Ko	1	..	38155i	72	1579	43.0	-20 12	8.58	9.1	Ko	3	..	39936b
23	1159	42.8	+56 7	9.2	9.8	G	1	..	37526i	73	3622	43.0	-25 56	9.2	9.7	G5	1	..	20582b
24	1129	42.8	+55 12	9.7	9.7	A	2	E	37526i	74	3464	43.0	-29 6	10.0	9.8	Go	2	..	24433b
25	1075	42.8	+53 5	8.8	9.4	Go	3	..	37419i	75	3222	43.0	-33 34	8.7	8.6	Ao	5	..	20534b
26	1356	42.8	+50 15	8.9	9.0	A2	3	..	37419i	76	2568	43.0	-47 28	10.0	11.0	K5	1	..	38414b
27	1194	42.8	+46 15	9.2	9.2	Ao	4	2,1	5400m	77	1047	43.0	-57 21	8.2	9.0	F5	4	..	13007b
28	1273	42.8	+10 6	9.6	9.9	Fo	1	..	38200i	78	650	43.0	-69 13	9.1	10.3	K5	1	..	15168b
29	1411	42.8	+ 5 56	8.9	8.9	B9	2	..	37652i	79	405	43.0	-74 28	9.9	10.5	Go	2	..	20652b
30	1607	42.8	+ 0 53	8.79	8.55	B	2	..	12671b	80	1414	43.1	+32 43	5.76	6.76	Ko	7	..	37527i
31	1558	42.8	- 8 54	5.26	6.44	K5	4	..	10638b	81	1504	43.1	+23 19	7.6	7.6	Ao	8	..	37441i
32	1557	42.8	-19 32	8.9	9.2	Ko	2	..	18975b	82	1449	43.1	+14 31	8.9	8.9	A	2	..	38200i
33	1576	42.8	-20 55	6.00	5.3	B8	..	0,8	56,122	83	1300	43.1	+12 40	8.2	8.8	Go	1	..	38200i
34	1577	42.8	-21 0	8.0	8.9	Ko	3	..	39936b	84	1506	43.1	+ 8 44	8.8	8.8	B9	3	..	12670b
35	1531	42.8	-22 35	8.7	8.2	B9	7	..	20535b	85	1610	43.1	+ 0 24	7.34	7.90	Go	4	..	38196i
36	3065	42.8	-37 41	6.10	5.9	B5	8	4,5	18558b	86	1652	43.1	- 9 34	8.6	8.6	Ao	6	..	20895b
37	995	42.8	-52 16	7.6	9.1	G5	2	..	10697b	87	1636	43.1	-11 37	8.5	9.0	F8	4	..	24340b
38	630	42.8	-63 48	9.0	10.1	K2	1	..	15176b	88	1553	43.1	-18 7	9.4	9.5	A2	3	..	18975b
39	556	42.8	-68 10	8.9	8.9	B9	5	..	15168b	89	1533	43.1	-22 22	9.2	8.8	Ao	3	..	20535b
40	394	42.9	+69 0	5.13	5.01	B5	..	2,10	56,83	90	1532	43.1	-22 57	8.5	8.9	K5	2	..	12631b
41	604	42.9	+64 16	9.7	9.8	A2	3	..	37545i	91	3422	43.1	-28 18	9.7	10.1	K2	1	..	24433b
42	1024	42.9	+59 24	8.6	10.0	Ma	3	..	37526i	92	3465	43.1	-29 30	8.5	8.3	Ao	5	..	20582b
43	1239	42.9	+51 43	8.7	8.8	A3	3	..	37419i	93	2836	43.1	-39 21	10.0	9.9	Fo	2	..	20534b
44	1754	42.9	+39 35	7.62	7.60	B9	4	..	38408i	94	2678	43.1	-43 42	8.5	8.5	Fo	4	..	20556b
45	1236	42.9	+27 18	6.58	6.64	A2	7	..	38185i	95	2383	43.1	-50 39	10.0	10.0	Fo	2	..	38414b
46	1388	42.9	+21 28	8.0	8.5	F8	3	..	37441i	96	996	43.1	-52 6	6.32	7.5	G5	5	..	10697b
47	1274	42.9	+10 35	8.5	9.3	G5	1	..	38200i	97	767	43.1	-58 46	8.6	9.0	F5	2	..	13007b
48	1557	42.9	- 8 26	8.7	8.7	B9	5	..	20895b	98	478	43.1	-71 7	8.1	9.1	Ko	6	..	15167b
49	1697	42.9	-10 56	9.1	9.2	A3	4	..	24340b	99	972	43.2	+58 49	9.2	10.0	G5	1	..	37526i
50	1578	42.9	-20 13	9.2	9.9	Mb	2	..	39936b	100	..	43.2	+45 48	..	..	G	1	..	5400m

THE HENRY DRAPER CATALOGUE.

49400

6^h 43^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1604	m. 43.2	° + 43 50	8.9	8.9	Ao	7	2,2	5400m	51	1453	m. 43.4	° + 4 39	8.9	8.9	Ao	2	..	37652i
2	1605	43.2	+ 43 24	10.2	10.5	F	2	..	5400m	52	1598	43.4	- 3 4	9.8	9.8	A	1	..	20867b
3	1729	43.2	+ 40 3	8.22	8.78	Go	2	..	38941i	53	1599	43.4	- 3 8	9.8	10.1	F	1	..	20867b
4	1755	43.2	+ 39 49	8.72	8.72	Ao	2	..	38941i	54	1668	43.4	- 4 17	8.5	9.6	K2	2	..	12671b
5	1617	43.2	+ 38 56	7.70	7.78	A3	5	3,3	38941i	55	1667	43.4	- 4 36	8.0	8.0	Ao	7	..	12671b
6	1484	43.2	+ 22 25	7.10	7.08	B9	7	..	37441i	56	1654	43.4	- 9 6	9.1	9.1	Ao	4	..	20895b
7	1301	43.2	+ 12 44	8.4	8.5	A5	1	..	38200i	57	1638	43.4	- 11 46	9.0	9.5	F8	2	..	24340b
8	1507	43.2	+ 8 3	8.5	8.5	B8	4	..	12670b	58	1632	43.4	- 12 22	8.7	9.9	K5	2	..	24340b
9	1457	43.2	+ 7 45	8.3	9.1	G5	4	..	37652i	59	1657	43.4	- 13 36	7.7	7.7	Ao	2	..	8909b
10	1452	43.2	+ 3 57	8.9	9.0	A5	1	..	37652i	60	1582	43.4	- 20 14	9.2	9.4	Ko	2	..	39936b
11	1770	43.2	- 2 50	9.6	9.6	Ao	2	..	20867b	61	4375	43.4	- 23 45	9.7	8.8	A3	5	0,3	24433b
12	1740	43.2	- 6 17	9.1	10.1	Ko	3	..	24746b	62	4376	43.4	- 23 58	8.7	9.7	K2	3	..	24433b
13	1741	43.2	- 6 22	9.2	10.2	Ko	3	..	24746b	63	3631	43.4	- 25 36	7.9	8.2	Ao	8	..	20582b
14	1627	43.2	- 17 4	9.6	9.6	Ao	2	..	18975b	64	3628	43.4	- 25 37	8.1	9.1	G5	2	..	20582b
15	1626	43.2	- 17 24	6.94	6.92	B9	5	..	8902b	65	3629	43.4	- 25 56	10.9	10.1	A3	3	..	24433b
16	1581	43.2	- 20 41	9.8	8.8	Ao	3	..	39936b	66	3397	43.4	- 26 56	10.7	10.2	Ao	2	..	24433b
17	3271	43.2	- 27 15	9.5	9.3	Fo	3	..	20582b	67	3428	43.4	- 28 37	9.5	10.4	Ko	1	..	24433b
18	3269	43.2	- 28 1	10.7	9.6	Fo	2	..	24433b	68	3534	43.4	- 30 51	7.69	8.3	F5	5	..	20582b
19	3530	43.2	- 30 33	8.7	9.8	Ko	2	..	24433b	69	546	43.5	+ 65 17	9.9	10.5	Go	3	..	37545i
20	3143	43.2	- 36 30	7.6	8.7	Ko	5	..	20534b	70	1012	43.5	+ 57 16	8.0	8.5	F8	6	..	37526i
21	2900	43.2	- 44 31	9.0	8.8	Fo	2	..	20556b	71	1358	43.5	+ 45 12	9.9	10.0	A2	3	..	5400m
22	2418	43.2	- 50 0	10.0	10.8	Go	1	..	38414b	72	1511	43.5	+ 36 31	8.5	8.6	A2	4	..	38941i
23	997	43.2	- 52 24	8.6	9.1	Fo	5	..	38414b	73	1418	43.5	+ 31 39	8.05	8.83	G5	2	..	37527i
24	594	43.2	- 66 24	8.4	8.4	B9	7	..	18485b	74	1330	43.5	+ 15 51	8.7	8.8	A2	2	..	37441i
25	1551	43.3	+ 49 10	8.4	9.2	G5	3	..	37438i	75	1452	43.5	+ 14 46	8.5	8.6	A2	3	..	38200i
26	1416	43.3	+ 32 14	8.4	9.0	Go	3	..	37527i	76	1421	43.5	+ 13 28	8.9	9.0	A3	2	..	38200i
27	1359	43.3	+ 18 18	8.8	10.2	Ma	..	..	M	77	1527	43.5	+ 1 17	9.3	9.4	A2	3	..	20867b
28	1406	43.3	+ 17 12	8.7	8.7	A	2	..	37441i	78	1388	43.5	- 1 33	7.7	8.7	Ko	3	..	38196i
29	1393	43.3	+ 8 58	7.00	8.00	Ko	6	..	37652i	79	1771	43.5	- 2 5	9.6	9.6	B9	4	..	20867b
30	1403	43.3	+ 1 59	9.1	9.1	A	2	..	37652i	80	1600	43.5	- 3 23	8.5	8.9	F5	4	3,4	20895b
31	1524	43.3	+ 1 3	8.99	9.05	A2	2	..	20867b	81	1567	43.5	- 7 39	6.73	6.68	B8	10	..	20895b
32	1437	43.3	- 0 25	9.1	9.2	A5	2	..	20867b	82	1656	43.5	- 9 38	9.2	10.2	Ko	1	..	20895b
33	1438	43.3	- 0 56	8.8	8.8	Ao	5	..	20867b	83	1655	43.5	- 9 53	8.81	9.99	K5	1	..	20895b
34	1386	43.3	- 1 12	5.66	5.80	A5	9	..	20867b	84	1537	43.5	- 22 3	8.7	8.2	B9	7	..	20535b
35	1387	43.3	- 1 43	7.4	8.6	K5	4	..	12671b	85	4437	43.5	- 24 50	8.10	7.8	B8	8	..	20582b
36	1597	43.3	- 3 9	10.1	10.1	Ao	2	..	20867b	86	3632	43.5	- 25 3	9.00	9.0	A2	4	..	20582b
37	1653	43.3	- 9 41	8.7	9.5	G5	2	..	20895b	87	3273	43.5	- 27 32	10.2	10.4	Ko	1	..	24433b
38	1702	43.3	- 11 0	7.7	7.7	B9	7	..	24340b	88	3431	43.5	- 28 28	7.7	7.4	B3	9	..	20582b
39	1561	43.3	- 19 24	9.6	9.4	Ao	3	..	18975b	89	3475	43.5	- 29 42	10.2	9.8	Fo	2	..	24433b
40	3226	43.3	- 33 55	8.7	8.9	A2	4	..	20534b	90	3127	43.5	- 35 54	9.4	9.5	F5	1	..	20534b
41	3125	43.3	- 35 45	9.0	8.9	F5	3	..	20534b	91	2899	43.5	- 38 40	10.0	9.2	A2	4	..	20534b
42	1105	43.3	- 54 3	8.8	8.9	A2	4	..	13007b	92	2681	43.5	- 41 0	8.8	9.8	Ko	1	..	20556b
43	396	43.4	+ 69 47	9.04	10.11	K2	1	..	38155i	93	2668	43.5	- 46 24	10.2	10.3	G5	1	..	38414b
44	1005	43.4	+ 60 30	8.6	9.2	Go	5	..	37526i	94	697	43.5	- 59 12	9.0	9.0	A	3	..	15176b
45	1078	43.4	+ 54 19	8.6	9.0	F5	1	..	37419i	95	469	43.6	+ 66 33	8.6	9.8	K5	2	..	37545i
46	1542	43.4	+ 44 54	10.2	10.3	A3	1	..	5400m	96	1026	43.6	+ 59 47	9.26	9.82	Go	3	..	37526i
47	1606	43.4	+ 43 45	10.2	11.0	G5	1	..	5400m	97	1358	43.6	+ 50 39	8.6	9.0	F5	4	..	37419i
48	1756	43.4	+ 39 50	8.12	8.90	G5	2	..	38941i	98	1731	43.6	+ 40 52	8.5	8.6	A3	1	..	38941i
49	1248	43.4	+ 28 25	8.4	9.6	K5	1	..	38185i	99	1495	43.6	+ 35 10	7.07	7.85	G5	5	..	37527i
50	1458	43.4	+ 7 50	8.7	8.7	Ao	3	..	37652i	100	1446	43.6	+ 25 36	7.19	8.26	K2	4	..	38185i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

49500

6^h 43^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1487	43.6	+ 22 57	8.8	8.8	Ao	3	..	37441i	51	1597	43.8	- 21 27	9.2	8.8	Ao	3	..	20535b
2	1616	43.6	- 0 2	8.53	9.71	K5	2	..	20867b	52	4389	43.8	- 23 57	10.7	10.0	A	1	..	24433b
3	1603	43.6	- 3 58	7.7	8.2	F8	9	..	12671b	53	3282	43.8	- 27 7	10.2	10.4	Ko	1	..	24433b
4	1568	43.6	- 8 0	8.5	8.6	A2	3	..	20895b	54	3281	43.8	- 27 43	11.2	10.4	F8	1	..	24433b
5	1642	43.6	- 11 10	8.9	10.0	K2	2	..	24340b	55	3235	43.8	- 33 24	8.0	8.9	Ko	3	..	20534b
6	1641	43.6	- 11 55	9.0	9.1	A5	5	..	24340b	56	3131	43.8	- 35 50	8.7	8.9	F5	4	..	20534b
7	4441	43.6	- 24 12	9.5	9.9	Go	3	..	24433b	57	2684	43.8	- 40 39	7.4	9.0	K2	4	..	20556b
8	4442	43.6	- 24 38	9.2	10.2	Ko	2	..	24433b	58	2584	43.8	- 41 22	9.0	9.2	Ao	4	..	20556b
9	3433	43.6	- 28 6	8.5	9.3	Ko	3	..	20582b	59	2908	43.8	- 44 52	8.24	8.6	K5	2	0,2	18483b
10	3478	43.6	- 29 17	9.0	9.0	A2	3	..	20582b	60	2572	43.8	- 47 35	8.4	8.0	B8	7	..	38414b
11	3477	43.6	- 30 0	9.5	10.1	A	2	..	24433b	61	698	43.8	- 59 35	8.7	8.7	A	3	..	15176b
12	3670	43.6	- 31 55	7.9	9.5	Ko	3	E	24433b	62	662	43.9	+ 63 5	8.8	9.1	F2	3	3,4	37545i
13	3075	43.6	- 38 0	8.7	9.5	Ko	3	..	20534b	63	1132	43.9	+ 55 18	8.6	9.6	Ko	1	..	38239i
14	2900	43.6	- 38 16	9.4	9.9	Go	2	..	20534b	64	1427	43.9	+ 13 18	8.2	8.7	F8	2	..	38200i
15	2501	43.6	- 48 14	9.6	10.3	F5	2	..	38414b	65	1306	43.9	+ 12 12	7.8	8.3	F8	4	..	38200i
16	2420	43.6	- 49 53	8.9	9.1	B9	6	..	38414b	66	1396	43.9	+ 9 42	8.1	8.9	G5	2	..	38200i
17	998	43.6	- 52 19	5.68	7.0	Ko	7	..	10697b	67	1531	43.9	+ 1 6	6.06	5.89	B3	9	..	37652i
18	711	43.6	- 61 8	6.84	8.1	Ko	7	..	15147b	68	1572	43.9	- 7 11	8.9	9.4	F8	2	..	20895b
19	1543	43.7	+ 44 22	9.2	10.4	K5	1	..	5400m	69	1565	43.9	- 9 1	8.6	8.6	Ao	7	..	20895b
20	1536	43.7	+ 41 54	5.04	6.04	Ko	9	R	37438i	70	1644	43.9	- 11 44	8.6	8.6	Ao	6	..	24340b
21	1415	43.7	+ 33 21	9.4	9.5	A2	2	..	37527i	71	1636	43.9	- 12 8	8.9	8.9	Ao	4	..	24340b
22	1361	43.7	+ 29 40	8.7	8.7	B9	3	..	37527i	72	1635	43.9	- 12 20	9.1	9.9	G5	3	..	24340b
23	1423	43.7	+ 13 51	8.3	8.6	Fo	3	..	38200i	73	1634	43.9	- 12 44	6.90	6.85	B8	4	..	8909b
24	1305	43.7	+ 12 18	9.1	10.5	Mb	..	..	M	74	1566	43.9	- 19 54	8.06	8.3	Ao	7	..	18975b
25	1510	43.7	+ 8 27	8.1	8.5	F5	3	..	37652i	75	3411	43.9	- 26 26	8.1	8.5	B8	6	..	20582b
26	1602	43.7	- 3 7	9.4	9.4	Ao	2	..	20867b	76	3284	43.9	- 27 30	9.2	9.6	Ko	2	..	20582b
27	1569	43.7	- 7 3	8.6	8.9	F2	4	..	20895b	77	2911	43.9	- 44 36	9.1	8.9	F8	2	..	20556b
28	1570	43.7	- 7 41	9.1	9.1	B8	3	..	20895b	78	1058	43.9	- 55 7	9.0	9.9	Ko	2	..	13007b
29	1631	43.7	- 17 7	7.7	7.7	Ao	2	..	8902b	79	699	43.9	- 59 50	8.8	9.9	K5	1	..	15176b
30	1554	43.7	- 19 1	8.7	9.1	Fo	4	..	18975b	80	547	44.0	+ 65 8	8.1	8.9	G5	4	..	37545i
31	652	43.7	- 69 12	8.8	8.8	B8	7	..	15168b	81	1544	44.0	+ 44 10	8.0	8.1	A2	6	2,8	37438i
32	480	43.7	- 71 48	8.0	9.1	K2	4	..	15167b	82	1362	44.0	+ 18 6	7.58	7.86	Fo	5	..	37441i
33	470	43.8	+ 66 17	8.8	9.9	K2	1	..	37545i	83	1332	44.0	+ 14 59	9.01	9.01	A	1	..	36977i
34	1131	43.8	+ 55 54	8.0	8.8	G5	2	..	38239i	84	1465	44.0	+ 7 13	8.3	8.3	Ao	3	..	37652i
35	1351	43.8	+ 47 29	9.2	9.2	A	1	..	37438i	85	1624	44.0	+ 0 12	9.1	9.1	B8	3	..	20867b
36	1496	43.8	+ 34 59	8.87	9.43	Go	2	..	37527i	86	1605	44.0	- 3 25	8.7	9.7	Ko	1	..	20867b
37	1240	43.8	+ 27 7	8.2	8.2	Ao	3	..	38185i	87	1676	44.0	- 4 35	8.7	8.8	A2	5	..	12671b
38	1490	43.8	+ 22 11	8.5	8.8	Fo	3	..	37441i	88	1566	44.0	- 8 5	9.2	9.2	Ao	3	..	20895b
39	1492	43.8	+ 19 17	7.6	7.6	Ao	4	..	37441i	89	1663	44.0	- 13 58	9.2	9.3	A2	2	..	24340b
40	1424	43.8	+ 13 11	8.7	9.8	K2	2	..	38200i	90	1598	44.0	- 21 48	8.3	9.1	K5	2	..	20535b
41	1426	43.8	+ 5 42	8.7	9.7	Ko	4	..	12670b	91	3080	44.0	- 37 50	5.25	5.7	B9	..	0, R	M
42	1809	43.8	- 5 52	9.2	10.0	G5	1	..	20895b	92	2905	44.0	- 38 49	7.6	7.7	Ao	4	0,8	18558b
43	1571	43.8	- 7 19	8.9	10.0	K2	2	..	20895b	93	2505	44.0	- 48 35	9.6	10.3	F8	2	..	38414b
44	1562	43.8	- 8 27	9.1	9.4	F2	4	..	20895b	94	2071	44.0	- 51 6	8.3	8.2	A2	7	..	38414b
45	1709	43.8	- 10 44	8.3	8.3	B9	5	..	24340b	95	1112	44.0	- 54 56	8.48	9.2	F5	4	..	13007b
46	1660	43.8	- 13 19	8.3	8.9	Go	5	..	24340b	96	520	44.0	- 72 56	9.2	9.6	F5	4	..	20652b
47	1661	43.8	- 13 22	8.4	8.4	Ao	5	..	24340b	97	454	44.1	+ 68 22	8.2	8.5	F2	7	..	38155i
48	1519	43.8	- 15 13	8.3	8.3	B8	6	..	18975b	98	913	44.1	+ 61 13	8.8	9.1	Fo	2	..	38239i
49	1555	43.8	- 18 39	9.8	10.3	F8	1	..	18975b	99	1014	44.1	+ 57 49	9.4	10.4	Ko	1	..	38239i
50	1556	43.8	- 19 1	9.2	10.2	K	1	..	18975b	100	1136	44.1	+ 52 5	8.0	9.1	K2	3	..	37419i

THE HENRY DRAPER CATALOGUE.

49600

6^h 44^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1355	44.1	+47 30	9.2	10.3	K ₂	1	..	37438i	51	1570	44.3	-19 27	9.2	8.9	A ₂	4	..	18975b
2	..	44.1	+44 0	..	..	Go	1	..	5400m	52	1585	44.3	-20 57	9.6	9.1	A ₀	3	..	39936b
3	1732	44.1	+40 30	7.96	7.96	A ₀	3	..	38408i	53	3289	44.3	-27 36	10.9	10.4	G ₅	1	..	24433b
4	1598	44.1	+37 41	8.5	8.5	A ₀	3	..	38941i	54	3495	44.3	-29 28	9.3	9.5	G ₅	1	..	20582b
5	1420	44.1	+31 56	8.8	8.8	A ₀	2	..	37527i	55	2510	44.3	-48 50	10.2	10.0	F ₅	2	..	38414b
6	1298	44.1	+16 19	5.69	5.64	B ₈	..	..	56,83	56	406	44.3	-74 35	9.3	9.6	F ₂	7	..	20652b
7	1397	44.1	+9 44	8.3	9.1	G ₅	1	..	38200i	57	1079	44.4	+54 8	8.6	9.6	K ₀	2	..	37419i
8	1446	44.1	-0 19	8.3	9.1	G ₅	7	..	20867b	58	1546	44.4	+44 1	9.7	10.9	K ₅	1	..	5400m
9	1678	44.1	-4 23	9.1	9.1	B ₉	4	..	12671b	59	1300	44.4	+16 34	7.7	8.5	G ₅	5	..	37441i
10	1567	44.1	-8 12	8.5	8.5	A ₀	6	..	20895b	60	1449	44.4	-0 7	8.73	8.71	B ₉	4	..	20867b
11	4453	44.1	-24 28	9.3	9.0	A ₂	3	..	20582b	61	1752	44.4	-6 25	9.1	9.9	G ₅	1	..	20895b
12	3415	44.1	-26 14	10.7	10.1	A ₃	2	..	24433b	62	1599	44.4	-15 2	5.29	5.17	B ₅	..	0,9	56,83
13	2575	44.1	-47 39	9.6	9.4	F ₈	2	..	38414b	63	1634	44.4	-17 9	9.0	10.2	K ₅	1	..	18975b
14	2574	44.1	-47 42	7.0	7.8	G ₅	7	..	38414b	64	1541	44.4	-22 47	8.9	8.8	F ₈	3	..	12631b
15	2425	44.1	-49 54	10.2	10.6	K ₀	1	..	38414b	65	3422	44.4	-27 0	10.7	10.2	F ₅	1	..	24433b
16	616	44.1	-64 33	9.2	9.5	F ₀	2	5,2	15147b	66	2850	44.4	-39 40	9.0	9.2	A ₅	4	..	20534b
17	914	44.2	+61 9	8.9	9.0	A ₅	3	..	37526i	67	2587	44.4	-41 15	9.3	9.5	F ₂	2	..	20556b
18	1028	44.2	+59 34	..	..	F ₅	10	R	37526i	68	2581	44.4	-47 3	9.4	8.9	F ₀	5	..	38414b
19	..	44.2	+59 34	5.44	5.86	A ₂	..	..	..	69	2513	44.4	-48 26	9.4	10.9	K ₀	1	..	38414b
20	..	44.2	+46 39	..	..	G	1	..	5400m	70	774	44.4	-58 48	9.5	10.5	K ₀	2	..	13007b
21	1418	44.2	+32 52	8.4	9.2	G ₅	3	..	37527i	71	915	44.5	+61 9	8.0	9.4	Mb	3	..	37526i
22	1417	44.2	+24 16	8.4	8.8	F ₅	2	..	38185i	72	1361	44.5	+50 47	8.6	8.9	F ₂	4	..	37419i
23	1430	44.2	+13 54	8.3	8.3	A ₀	4	..	38200i	73	..	44.5	+43 25	..	..	K ₀	1	..	5400m
24	1660	44.2	-9 28	9.2	9.3	A ₂	2	..	20895b	74	1544	44.5	+40 59	7.7	8.3	Go	2	..	38941i
25	1659	44.2	-9 42	7.9	8.9	K ₀	6	..	20895b	75	1509	44.5	+23 47	8.6	8.6	A ₀	5	..	38185i
26	3419	44.2	-26 58	9.5	9.3	A ₃	3	..	20582b	76	1310	44.5	+12 10	7.4	8.8	Ma	3	..	38200i
27	3441	44.2	-28 20	9.0	9.6	K ₀	2	..	20582b	77	1517	44.5	+8 45	7.7	7.7	B ₉	5	..	37652i
28	3548	44.2	-30 20	8.10	8.6	G ₅	4	..	20582b	78	1753	44.5	-6 4	9.1	9.5	F ₅	1	..	20895b
29	3680	44.2	-31 31	9.5	9.5	A ₂	3	E	24433b	79	1576	44.5	-7 37	8.7	8.8	A ₃	4	..	20895b
30	2846	44.2	-39 4	9.0	9.6	K ₀	2	..	20534b	80	1575	44.5	-7 55	9.1	9.1	A ₀	4	..	20895b
31	650	44.2	-65 28	9.1	10.1	K ₀	1	..	15223b	81	1668	44.5	-14 1	9.0	10.0	K ₀	1	..	24340b
32	338	44.3	+72 0	8.0	9.0	K ₀	2	..	37559i	82	1588	44.5	-20 18	9.6	9.4	A ₀	1	..	39936b
33	1197	44.3	+46 38	7.56	8.56	K ₀	5	2,6	37438i	83	1589	44.5	-20 19	9.1	9.7	Mc	2	..	39936b
34	1496	44.3	+19 19	8.3	8.3	A ₀	2	..	37441i	84	3650	44.5	-25 47	11.2	10.1	A ₃	3	..	24433b
35	1365	44.3	+18 54	7.7	8.1	F ₅	3	R	37441i	85	3685	44.5	-31 22	9.5	9.8	F ₀	2	E	24433b
36	..	44.3	+18 54	..	..	A ₃	..	..	..	86	3158	44.5	-36 7	10.7	9.3	A ₀	2	..	20534b
37	1409	44.3	+17 42	8.1	9.1	K ₀	2	..	37441i	87	2583	44.5	-47 19	8.8	8.9	F ₅	4	..	38414b
38	1456	44.3	+14 48	8.47	9.03	Go	2	..	36977i	88	2394	44.5	-50 17	9.4	10.3	K ₀	2	..	38414b
39	1309	44.3	+12 1	7.7	8.7	K ₀	2	..	38200i	89	2078	44.5	-51 10	5.28	6.9	K ₂	..	..	56,123
40	1467	44.3	+7 57	8.2	8.3	A ₅	5	..	37652i	90	700	44.5	-60 10	8.92	9.7	K ₂	1	..	15176b
41	1414	44.3	+3 49	7.8	8.8	K ₀	4	..	37652i	91	634	44.5	-63 14	9.3	9.6	F ₀	2	..	15176b
42	1448	44.3	-0 27	8.9	8.9	B ₉	2	..	20867b	92	650	44.5	-67 36	9.0	9.0	B ₉	6	..	15223b
43	1776	44.3	-2 10	5.65	5.65	A ₀	10	E	38196i	93	239	44.5	-78 26	10.2	10.8	Go	2	..	20652b
44	1777	44.3	-2 32	9.4	9.4	A ₀	2	..	20867b	94	885	44.6	+62 23	9.2	9.8	G	1	..	37545i
45	1606	44.3	-3 13	9.1	10.1	K ₀	1	..	20867b	95	1135	44.6	+55 47	8.5	9.5	K ₀	2	..	38239i
46	1595	44.3	-14 15	9.2	9.2	A ₀	3	..	24340b	96	1370	44.6	+26 25	8.0	9.0	K ₀	1	..	38185i
47	1597	44.3	-14 17	7.9	9.0	K ₂	4	..	24340b	97	1458	44.6	+25 2	8.76	9.76	K ₀	1	..	38185i
48	1521	44.3	-15 20	9.2	9.2	B ₉	3	..	18975b	98	1587	44.6	+20 5	8.45	9.23	G ₅	1	..	37441i
49	1609	44.3	-16 6	7.7	8.7	K ₀	5	..	18975b	99	1642	44.6	-12 33	7.5	7.5	B ₉	7	..	24340b
50	1559	44.3	-18 34	9.8	9.9	A ₂	2	..	18975b	100	4410	44.6	-23 6	7.48	8.3	F ₅	7	..	12631b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

49700

6^h 44^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3653	44.6	-25 34	8.3	9.6	K ₂	2	..	20582b	51	3088	44.8	-37 53	8.7	9.5	K ₂	2	..	20534b
2	3292	44.6	-27 17	8.0	7.7	B ₅	8	..	20582b	52	2912	44.8	-38 47	8.7	8.3	A ₂	7	..	20534b
3	3498	44.6	-29 20	9.2	9.2	A ₅	2	..	20582b	53	2740	44.8	-42 32	8.6	9.6	G ₅	2	..	20556b
4	3500	44.6	-29 53	9.20	9.5	A ₅	1	..	20582b	54	2696	44.8	-43 47	9.2	9.4	A ₂	2	..	20556b
5	1115	44.6	-54 36	6.35	7.1	G ₅	9	..	13007b	55	2681	44.8	-46 17	10.2	9.7	A ₂	3	..	38414b
6	402	44.6	-75 24	9.5	10.5	K ₀	2	..	20652b	56	2682	44.8	-46 27	10.2	9.7	F ₅	3	..	38414b
7	973	44.7	+57 57	8.9	9.2	F ₂	3	..	38239i	57	2680	44.8	-46 38	10.0	10.3	K ₀	2	..	38414b
8	1552	44.7	+49 36	9.2	9.3	A ₃	1	..	37438i	58	2515	44.8	-48 28	6.9	7.3	Go	9	..	38414b
9	1607	44.7	+43 48	8.5	8.8	F ₀	4	0.3-	37501i	59	223	44.8	-79 7	10.4	11.4	K	1	..	20652b
10	1498	44.7	+19 25	7.9	7.9	A ₀	4	..	37441i	60	368	44.9	+71 21	9.5	9.6	A ₂	3	..	37559i
11	1397	44.7	+ 6 22	7.5	7.5	B ₈	7	..	37652i	61	1140	44.9	+52 47	8.2	8.3	A ₃	6	..	37419i
12	1433	44.7	+ 5 47	8.7	9.2	F ₈	2	..	37652i	62	1345	44.9	+29 58	8.16	9.16	K ₀	2	..	37527i
13	1395	44.7	- 1 13	7.7	7.7	A ₀	8	..	20867b	63	1502	44.9	+19 13	9.1	9.1	B ₈	1	R	37441i
14	1610	44.7	- 3 30	9.2	9.3	A ₂	3	..	12671b	64	1303	44.9	+16 20	8.7	8.7	A ₀	3	..	37441i
15	1755	44.7	- 6 29	8.7	8.7	B ₈	5	..	20895b	65	1635	44.9	+ 0 52	8.34	8.32	B ₉	2	..	37652i
16	1756	44.7	- 7 2	8.5	9.6	K ₂	4	..	20895b	66	1759	44.9	- 6 17	9.1	9.9	G ₅	1	..	20895b
17	1570	44.7	- 8 34	9.6	9.6	A	4	R	20895b	67	1579	44.9	- 7 27	10.1	10.1	A	1	..	20895b
18	1572	44.7	- 9 0	8.7	8.7	A ₀	4	..	20895b	68	1645	44.9	-12 36	9.4	9.5	A ₂	2	..	24340b
19	1666	44.7	- 9 5	9.1	9.1	A ₀	5	..	20895b	69	1636	44.9	-17 56	9.6	9.7	A ₅	2	..	18975b
20	1590	44.7	-20 33	9.2	9.4	K ₅	1	..	39936b	70	1562	44.9	-18 12	9.1	10.1	K ₀	1	..	18975b
21	4459	44.7	-24 54	9.50	8.8	B ₉	4	..	20582b	71	1563	44.9	-18 21	8.6	8.6	B ₉	2	..	8902b
22	3294	44.7	-27 3	9.7	9.1	F ₀	3	..	20582b	72	1547	44.9	-22 36	9.1	9.4	K ₀	1	..	12631b
23	3454	44.7	-28 7	7.30	7.7	A ₀	9	..	20582b	73	3384	44.9	-32 21	8.7	9.0	K ₀	3	..	18385b
24	3455	44.7	-28 16	7.9	8.5	A ₀	5	..	20582b	74	3091	44.9	-37 46	10.4	9.5	A	2	..	20534b
25	3160	44.7	-36 53	9.4	9.5	A ₅	2	..	20534b	75	2914	44.9	-38 33	8.0	8.6	K ₀	7	..	20534b
26	2853	44.7	-39 34	8.4	8.6	F ₀	7	..	20534b	76	2860	44.9	-39 22	10.4	10.1	A ₂	3	..	20534b
27	2695	44.7	-43 22	9.4	9.7	A ₃	1	..	20556b	77	2685	44.9	-46 13	9.6	9.7	Go	3	..	38414b
28	2916	44.7	-44 37	7.6	8.3	K ₂	4	..	20556b	78	2588	44.9	-47 12	7.1	7.6	G ₅	8	..	38414b
29	472	44.8	+66 6	8.9	9.7	G ₅	2	..	37545i	79	600	44.9	-66 46	8.9	9.5	Go	4	..	15223b
30	1363	44.8	+50 3	9.4	9.8	F ₅	2	..	37419i	80	228	45.0	+81 9	9.4	10.0	Go	1	..	38330i
31	1609	44.8	+43 10	10.2	10.8	G	1	..	5400m	81	1247	45.0	+51 31	9.2	9.3	A ₃	2	..	37419i
32	1546	44.8	+41 41	7.8	8.3	F ₈	3	3.2	38941i	82	1374	45.0	+29 15	8.2	8.3	A ₂	3	..	37527i
33	1421	44.8	+32 16	7.8	7.8	A ₀	4	..	37527i	83	1590	45.0	+20 55	8.6	8.6	A ₀	3	..	37441i
34	1420	44.8	+32 3	9.5	10.1	G	1	..	37527i	84	1589	45.0	+20 6	8.30	9.37	K ₂	1	..	37441i
35	1371	44.8	+26 1	8.8	9.3	F ₈	1	..	38185i	85	1783	45.0	- 2 10	8.5	8.5	B ₉	6	..	20867b
36	1460	44.8	+25 52	6.91	7.41	F ₈	6	..	38185i	86	1612	45.0	- 3 45	9.4	9.5	A ₂	3	..	12671b
37	1499	44.8	+19 43	8.8	8.8	A	1	..	37441i	87	1815	45.0	- 5 24	7.30	7.18	B ₅	10	..	20895b
38	1434	44.8	+13 32	5.90	6.90	K ₀	7	..	38200i	88	1564	45.0	-18 18	9.1	9.9	G ₅	4	..	18975b
39	1434	44.8	+ 5 47	6.66	6.80	A ₅	7	..	37652i	89	4463	45.0	-24 30	9.7	9.1	A ₃	3	..	20582b
40	1758	44.8	- 6 10	9.1	9.9	G ₅	2	..	20895b	90	3665	45.0	-25 57	7.32	8.4	K ₂	6	..	20582b
41	1578	44.8	- 7 18	7.18	8.25	K ₂	7	..	20895b	91	3299	45.0	-27 3	10.7	9.6	F ₀	1	..	20582b
42	1667	44.8	- 9 27	9.1	9.6	F ₈	3	..	20895b	92	3298	45.0	-27 59	9.2	9.3	F ₅	2	..	20582b
43	1668	44.8	- 9 53	9.56	9.56	A ₀	3	..	20895b	93	3514	45.0	-29 38	7.06	8.6	K ₂	7	..	20582b
44	1643	44.8	-12 20	9.1	9.6	F ₈	3	..	24340b	94	3094	45.0	-37 30	8.4	8.0	A ₃	2	2,8	18558b
45	1670	44.8	-13 17	9.1	10.3	K ₅	3	E	24463b	95	3093	45.0	-37 54	10.0	9.5	Go	2	..	20534b
46	1669	44.8	-13 35	8.6	8.6	B ₉	6	..	24340b	96	2861	45.0	-39 2	10.4	10.1	A	1	..	20534b
47	1523	44.8	-15 48	8.9	9.4	F ₈	3	..	18975b	97	2862	45.0	-39 6	10.4	9.6	A ₀	3	..	20534b
48	3296	44.8	-27 16	9.2	9.3	Go	2	..	20582b	98	2920	45.0	-44 13	8.6	7.6	Oe ₅	6	R	20556b
49	3457	44.8	-28 38	7.9	9.0	K ₀	3	..	20582b	99	2750	45.0	-45 7	9.72	10.3	K ₂	2	..	38414b
50	3691	44.8	-31 15	7.9	8.3	F ₀	5	..	20582b	100	618	45.0	-64 56	7.34	8.9	Ma	4	..	18485b

THE HENRY DRAPER CATALOGUE.

49800

6^h 45^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	273	45.1	+75 19	7.87	8.29	F5	5	E	37343i	51	2754	45.3	-45 17	9.4	8.8	Ao	3	..	20556b
2	369	45.1	+71 36	9.7	9.7	A	2	..	37559i	52	2519	45.3	-48 57	7.5	7.3	Fo	7	..	38414b
3	1765	45.1	+39 56	8.72	8.72	Ao	3	..	38941i	53	703	45.3	-59 46	9.6	9.6	A	1	..	15176b
4	1517	45.1	+36 1	9.4	9.4	Ao	1	..	37527i	54	652	45.3	-67 43	8.3	9.1	G5	3	..	15223b
5	1417	45.1	+33 24	8.2	8.2	B8	3	..	37527i	55	486	45.3	-71 53	8.9	9.7	G5	2	..	15167b
6	1475	45.1	+ 7 18	7.5	8.5	Ko	3	..	37652i	56	1136	45.4	+55 52	9.2	10.0	G5	1	..	37526i
7	1438	45.1	+ 5 0	8.91	8.91	A	2	..	37652i	57	1137	45.4	+55 0	8.21	9.21	Ko	3	..	38239i
8	1637	45.1	+ 0 15	8.3	8.6	F2	3	..	37652i	58	1358	45.4	+47 19	8.0	8.3	F2	5	..	37438i
9	1681	45.1	- 4 27	10.1	10.1	A	1	..	20895b	59	1346	45.4	+15 19	8.4	9.0	G	1	..	36977i
10	1654	45.1	-11 23	9.4	9.4	B8	4	..	24340b	60	1458	45.4	- 0 23	8.9	9.4	F8	2	..	20867b
11	1672	45.1	-13 51	9.1	9.2	A3	3	..	24340b	61	1457	45.4	- 0 35	9.6	9.6	Ao	3	..	20867b
12	1601	45.1	-14 56	7.44	7.42	B9	3	..	8902b	62	1404	45.4	- 1 7	9.6	9.7	A3	2	..	20867b
13	1639	45.1	-17 37	8.9	10.1	K5	1	..	18975b	63	1656	45.4	-11 15	9.1	10.2	K2	2	..	24340b
14	1607	45.1	-21 55	9.4	9.4	Go	1	..	12631b	64	1651	45.4	-12 51	8.3	8.3	Ao	2	..	8909b
15	3667	45.1	-25 50	10.4	9.6	G5	2	..	24433b	65	1641	45.4	-17 27	8.9	9.0	A2	4	..	18975b
16	3300	45.1	-27 14	11.4	9.9	Go	2	..	24433b	66	1575	45.4	-19 16	7.7	8.6	G5	5	..	18975b
17	3470	45.1	-28 48	9.7	9.7	F5	2	..	24433b	67	1551	45.4	-22 45	9.6	9.4	B9	2	..	12631b
18	3517	45.1	-29 8	10.9	10.4	F8	2	..	24433b	68	R	45.4	-24 2	7.7	7.8	A2	10	..	24433b
19	2590	45.1	-47 54	9.8	10.3	Ko	1	..	38414b	69	3438	45.4	-26 58	9.7	9.4	B9	2	..	20582b
20	1158	45.1	-53 19	8.9	9.2	Ao	2	..	10697b	70	3303	45.4	-27 27	11.2	10.1	Go	1	..	24433b
21	776	45.1	-58 33	8.4	9.1	G5	4	5,2	13007b	71	3302	45.4	-27 51	10.7	9.3	Fo	2	..	20582b
22	461	45.2	+67 21	9.2	9.3	A2	3	..	37545i	72	3475	45.4	-28 52	6.95	7.5	Fo	10	..	20582b
23	..	45.2	+46 35	..	..	K	1	..	5400m	73	3568	45.4	-30 22	9.2	9.8	Go	1	..	24433b
24	1399	45.2	+21 32	9.1	9.2	A3	2	..	37441i	74	2923	45.4	-38 55	9.4	10.4	Ko	1	..	20534b
25	1340	45.2	+15 44	8.3	8.3	B9	3	..	37441i	75	2593	45.4	-47 8	10.2	10.0	F8	2	..	38414b
26	1342	45.2	+15 5	8.34	9.34	Ko	1	..	36977i	76	2591	45.4	-48 0	9.8	10.0	G5	2	..	38414b
27	1404	45.2	+ 9 23	8.4	8.4	Ao	2	..	38200i	77	1063	45.4	-55 26	5.62	7.5	K2	..	0,10	56,123
28	1439	45.2	+ 5 2	8.56	8.70	A5	4	..	37652i	78	266	45.5	+77 6	4.75	5.93	K5	..	0,9 R	879c
29	1402	45.2	- 1 37	8.9	8.9	Ao	3	..	20867b	79	548	45.5	+65 45	9.7	10.3	G	2	..	37545i
30	1820	45.2	- 5 42	8.5	9.6	K2	2	..	20895b	80	887	45.5	+62 35	8.7	9.5	G5	2	..	37545i
31	1760	45.2	- 6 41	9.1	10.2	K2	1	..	20895b	81	1556	45.5	+49 39	7.92	8.99	K2	3	..	37438i
32	1655	45.2	-11 35	9.1	9.1	Ao	6	..	24340b	82	..	45.5	+46 33	..	..	G	1	..	5400m
33	3120	45.2	-34 50	6.89	7.2	B9	4	1,9	7406b	83	1199	45.5	+46 5	10.2	11.3	K2	1	..	5400m
34	3148	45.2	-35 39	8.0	8.7	Ko	5	..	20534b	84	1613	45.5	+42 44	7.8	7.8	Ao	3	..	37438i
35	240	45.2	-78 21	8.8	8.8	B9	8	..	20652b	85	1371	45.5	+18 47	8.9	9.0	A2	2	..	37441i
36	93	45.2	-84 36	8.1	9.5	Ma	4	..	20557b	86	1764	45.5	- 6 5	8.1	8.1	B8	9	..	20895b
37	1141	45.3	+52 35	8.9	9.0	A3	2	..	37419i	87	1763	45.5	- 6 22	8.9	9.2	F2	2	..	20895b
38	1513	45.3	+23 29	8.6	9.4	G5	3	..	37441i	88	1652	45.5	-12 29	7.4	7.3	B5	4	..	8909b
39	1460	45.3	+13 59	8.2	9.2	Ko	1	..	36977i	89	1677	45.5	-13 30	8.3	8.3	Ao	5	..	24340b
40	1327	45.3	+11 47	7.4	8.2	G5	3	..	38200i	90	1576	45.5	-19 9	9.2	9.1	A2	2	..	18975b
41	1440	45.3	+ 5 46	8.9	9.7	G5	2	..	12670b	91	4438	45.5	-23 58	6.24	6.6	Ao	..	R	28,199
42	1683	45.3	- 5 2	8.60	9.67	K2	2	..	20895b	92	4435	45.5	-24 2	9.3	8.3	Ao	..	..	28,199
43	1821	45.3	- 6 2	9.0	9.0	Ao	4	..	20895b	93	3440	45.5	-26 27	9.2	9.4	A2	2	..	20582b
44	1584	45.3	- 7 41	8.9	8.9	Ao	5	..	20895b	94	3480	45.5	-28 33	7.40	8.4	Ko	6	..	20582b
45	1618	45.3	-16 12	6.9	8.1	K5	3	..	18975b	95	3570	45.5	-30 44	8.7	8.6	Ao	4	..	20582b
46	1609	45.3	-21 4	8.4	8.0	B8	6	2,2	12631b	96	3701	45.5	-31 27	9.3	8.9	Ao	4	E	24433b
47	3564	45.3	-30 17	9.5	9.9	A3	1	..	24433b	97	2699	45.5	-40 2	8.27	8.9	K2	4	..	20534b
48	3163	45.3	-36 29	8.5	9.3	G5	2	..	20534b	98	2687	45.5	-46 35	9.6	8.8	Ao	5	..	38414b
49	2750	45.3	-42 57	8.2	8.3	Ao	8	..	20556b	99	1163	45.5	-56 21	8.6	9.8	K2	3	..	13007b
50	2703	45.3	-43 42	7.53	7.6	A3	8	..	20556b	100	602	45.5	-66 14	9.1	10.3	K5	1	..	15223b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

49900

6^h 45^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	654	45.5	-67 49	9.1	10.3	K5	1	..	15223b	51	1469	45.8	+25 47	6.62	6.68	A2	7	..	38185i
2	1249	45.6	+51 37	6.95	7.37	F5	7	..	37419i	52	1420	45.8	+17 2	8.5	8.5	B9	3	..	37441i
3	1198	45.6	+46 49	10.2	10.2	Ao	2	..	5400m	53	1427	45.8	+1 58	9.2	9.2	Ao	3	5,2	20867b
4	1739	45.6	+40 3	7.37	8.37	Ko	2	..	38408i	54	1591	45.8	-7 12	9.2	9.2	Ao	4	..	20895b
5	1476	45.6	+34 46	9.5	9.5	Ao	1	..	37527i	55	1645	45.8	-17 11	6.54	6.60	A2	8	..	8902b
6	1475	45.6	+33 59	9.1	9.2	A5	2	..	37527i	56	1570	45.8	-18 30	9.4	9.8	F5	2	..	18975b
7	1427	45.6	+24 45	9.0	9.1	A3	1	..	38185i	57	1580	45.8	-19 54	9.2	9.4	Fo	2	..	39936b
8	1405	45.6	+21 53	5.22	5.22	Ao	..	0, R	56,83	58	3681	45.8	-25 56	9.5	9.3	Fo	4	..	20582b
9	1347	45.6	+15 12	7.29	8.47	K5	2	..	36977i	59	3485	45.8	-28 37	9.7	10.2	B9	3	..	24433b
10	1319	45.6	+12 35	8.3	8.9	Go	2	..	38200i	60	3707	45.8	-31 10	8.7	9.0	G5	4	E	24433b
11	1824	45.6	-5 28	9.8	9.8	B9	2	..	20895b	61	3403	45.8	-32 26	6.79	7.3	A2	3	2,2	7406b
12	1587	45.6	-7 6	9.6	9.9	F2	2	..	20895b	62	3165	45.8	-37 2	10.4	10.1	A2	1	..	20534b
13	1577	45.6	-8 33	9.1	9.2	A5	3	..	20895b	63	2760	45.8	-45 39	9.1	9.4	F2	3	..	38414b
14	1605	45.6	-14 20	8.5	8.6	A5	7	..	24340b	64	1160	45.8	-53 4	8.4	8.7	A2	5	1,2	38414b
15	1567	45.6	-18 59	9.4	9.5	A3	2	..	18975b	65	1065	45.8	-55 17	9.0	9.8	G5	1	..	13007b
16	1596	45.6	-20 59	8.9	9.1	F5	4	..	12631b	66	704	45.8	-59 51	8.9	8.7	Ko	1	..	15176b
17	3679	45.6	-25 22	9.5	9.6	A2	2	..	20582b	67	191	45.9	+82 0	9.2	10.3	K2	1	..	38330i
18	2926	45.6	-38 20	10.2	9.8	A2	2	..	20534b	68	1518	45.9	+23 44	5.77	6.95	K5	7	5,7	38185i
19	2707	45.6	-43 32	8.4	8.6	Fo	4	..	20556b	69	1598	45.9	+20 27	8.6	9.6	Ko	2	..	37441i
20	2928	45.6	-44 40	9.8	9.7	Ko	2	..	38414b	70	1422	45.9	+17 47	8.1	9.2	K2	1	..	37441i
21	2523	45.6	-48 8	10.5	10.0	A3	3	..	38414b	71	1320	45.9	+12 50	9.1	9.1	A	1	..	36977i
22	1118	45.6	-54 39	8.5	8.3	Ao	6	..	13007b	72	1531	45.9	+8 38	8.7	8.7	Ao	4	..	12670b
23	1064	45.6	-55 10	8.52	9.2	Ko	4	..	13007b	73	1546	45.9	+1 14	9.3	9.3	Ao	3	..	37652i
24	275	45.6	-77 29	9.2	9.7	F8	5	..	20652b	74	1463	45.9	-1 2	9.9	10.0	A3	2	..	20867b
25	192	45.6	-80 56	9.3	9.7	F5	3	..	20557b	75	1617	45.9	-3 46	8.9	9.7	G5	2	..	12671b
26	1250	45.7	+51 45	8.2	8.6	F5	4	..	37419i	76	1592	45.9	-7 56	6.24	6.24	Aop	4	R	10638b
27	1505	45.7	+35 54	8.6	8.6	Ao	2	..	37527i	77	1682	45.9	-14 0	7.9	7.7	B2	7	..	24340b
28	1422	45.7	+33 55	8.4	8.4	B9	4	..	37527i	78	1533	45.9	-15 55	8.0	8.0	B9	2	..	8909b
29	1421	45.7	+33 14	9.4	9.4	Ao	1	..	37527i	79	1623	45.9	-16 49	8.7	9.9	K5	2	..	18975b
30	1375	45.7	+26 32	8.1	8.2	A3	4	..	38185i	80	1624	45.9	-16 58	5.94	6.94	Ko	5	..	8902b
31	1468	45.7	+25 20	9.5	9.6	A5	2	..	38185i	81	1579	45.9	-19 28	9.1	9.4	G5	1	..	18975b
32	1405	45.7	+5 58	6.98	7.40	F5	6	..	37652i	82	4485	45.9	-24 57	9.5	9.6	F8	2	..	20582b
33	1462	45.7	-0 25	5.83	6.17	F2	8	3,9 R	37700i	83	3534	45.9	-29 26	9.7	10.1	Go	1	..	24433b
34	1406	45.7	-1 24	9.1	9.1	B9	5	..	20867b	84	2441	45.9	-49 31	9.6	10.2	Go	3	..	38414b
35	1685	45.7	-4 9	6.64	6.59	B8	9	..	12671b	85	222	46.0	+79 17	8.0	8.6	Go	3	0,3	38330i
36	1765	45.7	-6 36	9.6	10.4	G5	1	..	20895b	86	1081	46.0	+53 30	9.2	10.4	K5	..	..	M
37	1588	45.7	-7 17	10.2	10.2	A	2	..	20895b	87	1447	46.0	+48 36	8.6	9.6	Ko	1	..	37438i
38	1578	45.7	-8 7	9.6	9.6	Ao	3	..	20895b	88	1360	46.0	+45 43	9.4	10.6	K5	2	..	5400m
39	1552	45.7	-22 21	8.7	8.6	A5	5	..	12631b	89	1485	46.0	+7 53	8.5	8.5	B9	4	..	37652i
40	4480	45.7	-24 53	8.45	7.9	A2	7	..	20582b	90	1432	46.0	+2 15	8.1	8.1	Ao	5	..	37652i
41	3531	45.7	-29 41	11.2	11.0	A	1	..	24433b	91	1688	46.0	-4 9	8.1	9.1	Ko	5	0,3	20895b
42	2709	45.7	-43 42	7.12	7.4	B8	9	..	20556b	92	1827	46.0	-5 13	9.2	9.0	B	3	R	20895b
43	2758	45.7	-45 54	9.2	9.8	Ko	2	..	38414b	93	1769	46.0	-6 4	9.8	9.8	B9	2	..	20895b
44	2597	45.7	-47 31	8.8	8.2	Fo	7	..	38414b	94	1770	46.0	-6 26	9.6	9.6	B9	2	..	20895b
45	1004	45.7	-52 24	8.8	9.1	Fo	5	..	38414b	95	1571	46.0	-18 30	9.0	9.3	F2	4	..	18975b
46	1119	45.7	-54 27	8.9	9.8	Go	1	..	13007b	96	3309	46.0	-28 0	10.7	10.1	Ko	2	..	24433b
47	522	45.7	-73 1	6.33	7.4	Ko	10	..	20652b	97	3487	46.0	-28 34	9.5	9.7	K2	3	..	24433b
48	1200	45.8	+46 6	10.2	11.2	Ko	1	..	5400m	98	3536	46.0	-29 12	9.7	9.8	F5	1	..	20582b
49	1359	45.8	+44 58	6.10	6.24	A5	..	5,8	56,83	99	3537	46.0	-29 51	10.2	9.5	Ao	4	..	24433b
50	1615	45.8	+42 31	8.7	8.8	A3	1	..	37438i	100	3166	46.0	-36 54	8.0	8.3	Ao	7	..	20534b

THE HENRY DRAPER CATALOGUE.

50000

6^h 46^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2931	m. 46.0	° 38 33	9.0	9.5	Ao	3	..	20534b	51	1162	m. 46.3	° 53 47	8.1	8.3	A3	5	..	13007b
2	560	46.0	-70 20	5.88	7.8	K2	..	2,10	56,123	52	1068	46.3	-55 21	9.0	9.5	Go	3	..	13007b
3	1313	46.1	+16 44	8.5	8.5	B9	6	R	37441i	53	456	46.4	+68 19	8.6	8.6	B9	6	..	38155i
4	1329	46.1	+11 32	8.3	8.4	A2	2	..	38200i	54	888	46.4	+62 19	8.8	9.6	G5	2	..	37545i
5	1414	46.1	+9 34	7.00	8.18	K5	4	E	38200i	55	1448	46.4	+48 41	9.2	9.5	F2	2	..	37438i
6	1435	46.1	+3 44	8.8	8.9	A5	1	..	37652i	56	1511	46.4	+35 54	6.18	6.96	G5	5	..	37527i
7	1690	46.1	-4 53	10.1	10.1	Ao	2	..	20895b	57	1424	46.4	+33 48	8.6	9.6	Ko	2	..	37527i
8	1771	46.1	-6 59	8.7	8.7	Ao	6	..	20895b	58	1382	46.4	+29 34	7.66	8.08	F5	5	R	37527i
9	1724	46.1	-10 34	8.9	8.9	Ao	4	..	24340b	59	1325	46.4	+12 22	8.9	8.9	Ao	2	..	36977i
10	1659	46.1	-11 49	10.1	10.1	Ao	4	..	24340b	60	1301	46.4	+10 55	7.8	8.6	G5	3	..	38200i
11	3683	46.1	-25 34	10.7	10.1	A2	2	..	24433b	61	1475	46.4	+4 20	9.3	9.3	A	1	..	37652i
12	3310	46.1	-27 13	6.77	6.8	B3	10	..	20582b	62	1437	46.4	+3 9	6.22	6.22	Ao	9	..	37652i
13	3404	46.1	-32 23	3.78	3.59	B2p	..	1, R	28,199	63	1557	46.4	+1 22	9.6	9.6	B9	2	..	20867b
14	2528	46.1	-48 28	9.4	9.7	F8	4	..	38414b	64	1651	46.4	+0 25	8.3	8.1	B	2	R	20867b
15	2403	46.1	-50 38	10.2	10.9	Ko	1	..	38414b	65	1410	46.4	-1 13	9.3	9.4	A2	2	..	20867b
16	2095	46.1	-51 26	10.0	9.6	A2	4	..	38414b	66	1692	46.4	-4 48	10.1	10.4	Fo	3	..	20895b
17	1138	46.2	+55 47	8.4	9.0	Go	6	..	37526i	67	1680	46.4	-9 58	7.36	8.54	K5	7	..	20895b
18	1771	46.2	+38 59	6.06	6.40	F2	8	..	38408i	68	1614	46.4	-14 9	8.1	8.1	Ao	7	..	24340b
19	1481	46.2	+34 5	3.64	3.70	A2	..	0, R	2418c	69	1613	46.4	-14 20	9.6	9.6	B9	2	..	24340b
20	1322	46.2	+12 49	8.7	9.2	F8	1	..	36977i	70	1649	46.4	-17 11	8.7	8.7	B9	4	..	18975b
21	1408	46.2	+6 41	9.3	9.4	A2	3	..	12670b	71	1574	46.4	-18 18	9.4	9.8	F5	3	..	18975b
22	1474	46.2	+4 5	8.8	9.6	G5	2	..	37652i	72	1602	46.4	-20 43	7.4	7.3	B8	4	0,8	8902b
23	1549	46.2	+1 0	9.3	9.3	B9	3	..	20867b	73	1601	46.4	-20 49	9.1	8.8	A3	3	..	12631b
24	1648	46.2	+0 4	9.9	9.9	Ao	2	..	20867b	74	4496	46.4	-24 51	8.9	9.0	B8	4	..	20582b
25	1794	46.2	-2 50	8.1	8.2	A3	9	..	20867b	75	3314	46.4	-27 50	8.3	9.3	Ko	2	..	20582b
26	1691	46.2	-4 23	8.7	9.7	Ko	2	5,2	20895b	76	3543	46.4	-29 16	9.5	9.2	Ao	3	..	20582b
27	1829	46.2	-5 55	9.2	9.2	Ao	2	..	20895b	77	3582	46.4	-30 59	9.0	9.5	A2	3	E	24433b
28	1594	46.2	-7 49	9.1	9.4	F2	1	..	20895b	78	2602	46.4	-41 19	6.83	7.5	F5	8	..	20556b
29	1679	46.2	-10 1	8.21	8.21	Ao	7	..	20895b	79	2759	46.4	-42 51	10.0	9.8	A2	1	..	20556b
30	1660	46.2	-11 41	9.2	9.3	A2	4	..	24340b	80	2696	46.4	-46 36	7.5	7.6	B9	9	..	38414b
31	1609	46.2	-14 7	9.8	10.1	Fo	2	..	24340b	81	1069	46.4	-55 59	8.3	9.0	Go	5	..	13007b
32	1599	46.2	-20 15	9.1	9.2	G5	2	..	39936b	82	1411	46.5	+6 43	7.7	8.3	Go	5	..	37652i
33	3455	46.2	-26 40	8.7	9.3	Ko	5	..	24433b	83	1448	46.5	+5 13	6.76	6.57	B2p	6	R	37652i
34	3311	46.2	-27 29	11.6	10.2	G5	1	..	24433b	84	1656	46.5	+0 55	8.17	9.24	K2	4	..	20867b
35	716	46.2	-61 42	8.4	8.5	F8	5	2,3	15147b	85	1653	46.5	+0 32	8.7	8.7	Ao	3	..	20867b
36	427	46.3	+70 13	8.0	8.0	Ao	6	..	37559i	86	1655	46.5	+0 29	8.3	8.3	Ao	4	..	20867b
37	1636	46.3	+38 34	6.32	6.74	F5	5	..	38408i	87	1654	46.5	+0 27	9.3	9.3	A	2	..	20867b
38	1314	46.3	+16 8	8.3	8.3	B9	4	..	37441i	88	1694	46.5	-4 36	10.2	10.2	B8	2	..	20895b
39	1437	46.3	+2 46	7.13	7.55	F5	6	..	37652i	89	1833	46.5	-6 1	9.1	9.1	B9	5	..	20895b
40	1409	46.3	-1 51	8.3	8.3	Ao	7	..	20867b	90	1661	46.5	-11 19	9.1	9.1	Ao	4	..	24340b
41	1620	46.3	-3 23	7.9	7.9	B8	10	..	12671b	91	1686	46.5	-13 7	8.5	8.3	B2	5	..	24340b
42	1621	46.3	-3 59	9.1	9.9	G5	3	..	12671b	92	1557	46.5	-22 53	9.4	8.8	Ao	4	..	12631b
43	1654	46.3	-12 41	9.2	9.8	Go	2	..	24340b	93	3691	46.5	-25 40	6.24	6.0	B3	..	5,4	56,83
44	1610	46.3	-14 38	8.5	9.5	Ko	4	..	24340b	94	3465	46.5	-27 1	8.1	9.3	Ko	4	..	20582b
45	1537	46.3	-15 25	9.6	9.7	A3	3	..	18975b	95	3544	46.5	-29 50	10.2	10.4	G5	1	..	24433b
46	1555	46.3	-22 57	9.8	9.5	Ao	2	..	12631b	96	3278	46.5	-33 47	7.26	7.5	Ao	8	0,3	20534b
47	4460	46.3	-23 33	8.9	9.4	K5	3	..	24433b	97	2604	46.5	-41 45	9.0	9.2	Ao	3	..	20556b
48	3457	46.3	-26 6	10.2	9.9	F5	3	..	24433b	98	2446	46.5	-49 5	8.2	8.0	B9	7	..	38414b
49	3313	46.3	-27 11	9.2	9.0	Fo	3	..	20582b	99	1163	46.5	-53 54	7.6	7.6	Fo	6	..	13007b
50	2608	46.3	-48 0	7.7	7.9	G5	7	..	38414b	100	1165	46.5	-56 12	8.3	9.5	K5	3	..	13007b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

50100

6^h 46^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1058	46.5	-57 22	8.3	8.9	F5	3	..	13007b	51	1586	46.8	-8 46	9.4	10.4	Ko	1	..	20895b
2	1449	46.6	+48 15	9.2	10.0	G5	1	..	37438i	52	1685	46.8	-9 25	9.2	9.2	B9	4	..	20895b
3	1201	46.6	+46 20	8.2	9.2	Ko	5	0,3	5400m	53	1578	46.8	-18 54	6.92	7.00	A3	5	..	8902b
4	1547	46.6	+44 39	8.9	9.9	Ko	2	..	5400m	54	4507	46.8	-24 17	8.9	8.7	B5	4	..	20582b
5	1513	46.6	+35 4	7.87	8.87	Ko	2	..	37527i	55	4506	46.8	-24 37	8.9	8.5	B9	5	..	20582b
6	1478	46.6	+25 6	8.91	9.69	G5	1	..	38185i	56	3177	46.8	-36 38	8.4	9.0	Ko	3	..	20534b
7	1520	46.6	+23 9	9.1	9.1	Ao	2	..	38185i	57	2948	46.8	-38 57	7.27	8.0	Ko	8	..	20534b
8	1445	46.6	+13 23	8.7	9.7	Ko	1	..	36977i	58	1009	46.8	-52 56	9.9	9.9	A	2	E	38414b
9	1413	46.6	-1 32	8.8	8.8	B9	4	..	20867b	59	623	46.8	-64 59	8.74	9.5	Ko	4	..	15223b
10	1797	46.6	-2 32	9.2	9.2	B8	3	..	20867b	60	564	46.8	-70 25	7.6	8.6	Ko	7	..	15167b
11	1796	46.6	-2 54	8.9	8.9	Ao	5	..	20867b	61	1367	46.9	+50 8	7.17	7.17	Ao	7	..	37419i
12	1774	46.6	-6 27	8.7	9.7	Ko	2	..	20895b	62	1361	46.9	+45 32	9.7	10.1	F5	2	..	5400m
13	1599	46.6	-7 5	9.2	9.3	A2	2	..	20895b	63	1637	46.9	+38 26	7.7	8.9	K5	1	..	37447i
14	1682	46.6	-9 27	9.2	9.2	Ao	4	..	20895b	64	1608	46.9	+20 29	9.0	9.1	A2	3	..	37441i
15	1729	46.6	-11 0	7.9	8.9	Ko	7	..	24340b	65	1414	46.9	+6 47	8.5	8.5	Ao	3	..	12670b
16	1541	46.6	-15 17	9.8	9.9	A3	2	..	18975b	66	1413	46.9	+6 37	8.5	8.5	Ao	5	..	12670b
17	1650	46.6	-17 44	7.9	8.7	G5	6	..	18975b	67	1561	46.9	+1 23	8.3	9.5	K5	2	..	20867b
18	1603	46.6	-20 48	7.09	6.8	B3	5	0,9	8902b	68	1562	46.9	+1 8	8.4	8.7	Fo	3	..	20867b
19	1558	46.6	-22 34	9.2	9.4	Go	2	..	12631b	69	1414	46.9	-1 32	8.9	9.0	A2	4	..	20867b
20	3693	46.6	-25 18	8.7	9.3	F2	3	..	20582b	70	1801	46.9	-2 3	6.88	7.22	F2	10	..	20867b
21	3467	46.6	-26 58	10.7	10.1	F5	2	..	24433b	71	1836	46.9	-5 22	8.5	9.6	K2	3	..	20895b
22	3718	46.6	-31 22	8.5	8.3	A3	3	..	20582b	72	1837	46.9	-5 30	9.2	9.2	B9	2	..	20895b
23	3717	46.6	-31 36	5.63	6.1	B8	..	0,5-	56,123	73	1686	46.9	-9 14	8.9	8.9	B9	5	..	20895b
24	2943	46.6	-38 58	9.4	9.2	Fo	3	..	20534b	74	1660	46.9	-13 0	9.4	9.7	F	1	..	24340b
25	2605	46.6	-41 12	8.8	8.9	Fo	3	..	20556b	75	1619	46.9	-21 38	9.8	9.4	Ao	2	..	12631b
26	2768	46.6	-45 27	6.85	7.0	B8	9	..	38414b	76	4511	46.9	-24 35	10.2	9.6	Ao	3	..	24433b
27	1059	46.6	-57 33	7.1	8.3	Ko	6	..	13007b	77	3551	46.9	-29 20	7.9	8.3	G5	6	..	20582b
28	707	46.6	-59 4	9.0	9.6	A2	2	..	13007b	78	3721	46.9	-31 10	7.20	8.0	G5	7	..	20582b
29	194	46.6	-81 35	8.8	9.8	Ko	3	..	20557b	79	2949	46.9	-39 2	9.8	9.0	A2	7	..	20534b
30	1164	46.7	+56 4	8.4	8.4	B9	7	..	37526i	80	2765	46.9	-42 2	8.8	9.6	K2	3	..	20556b
31	1612	46.7	+43 19	10.2	10.2	Ao	2	..	5400m	81	2944	46.9	-44 56	8.34	8.5	A3	7	..	38414b
32	1479	46.7	+25 53	7.64	7.92	Fo	4	..	38185i	82	707	46.9	-60 44	8.3	9.0	Ko	2	..	15176b
33	1476	46.7	+4 53	var.	var.	Mb	3	R	37652i	83	226	46.9	-79 47	10.2	10.8	G	2	..	20652b
34	1798	46.7	-2 17	6.88	7.95	K2	8	..	20867b	84	1367	47.0	+47 13	9.7	9.8	A2	1	..	37438i
35	1624	46.7	-3 12	9.4	9.5	A2	3	..	20895b	85	1774	47.0	+39 17	7.68	8.86	K5	2	..	38941i
36	1625	46.7	-3 32	10.1	10.1	A	1	..	20895b	86	1482	47.0	+25 25	7.36	7.42	A2	5	R	38185i
37	1695	46.7	-4 4	9.8	9.8	B9	2	..	20895b	87	1335	47.0	+11 43	7.7	8.7	Ko	1	..	38200i
38	1775	46.7	-6 51	6.62	6.60	B9	10	..	20895b	88	1467	47.0	-0 11	9.03	9.03	Ao	2	..	20867b
39	1731	46.7	-10 34	9.0	10.0	Ko	2	..	24340b	89	1733	47.0	-10 23	9.4	9.4	B8	3	..	24340b
40	1662	46.7	-11 17	9.1	10.2	K2	1	..	24340b	90	1661	47.0	-12 35	8.9	10.0	K2	1	..	24340b
41	1577	46.7	-18 19	8.7	9.8	K2	3	..	18975b	91	1651	47.0	-17 55	8.7	8.7	Ao	7	0,2	18975b
42	1585	46.7	-19 28	8.3	8.8	G5	4	..	18975b	92	1606	47.0	-20 34	10.1	9.4	Ao	2	..	12631b
43	1617	46.7	-21 47	9.2	9.4	B9	2	..	12631b	93	3321	47.0	-27 47	10.0	9.6	A5	2	..	20582b
44	3474	46.7	-26 27	9.7	9.4	Ko	2	..	20582b	94	3508	47.0	-28 49	8.3	9.3	Ko	4	..	24433b
45	659	46.7	-67 14	10.1	10.1	Ao	2	..	15223b	95	3593	47.0	-30 28	8.0	10.1	K5	2	..	24433b
46	371	46.8	+71 52	8.8	9.9	K2	1	..	37559i	96	2773	47.0	-45 20	6.37	7.9	Ko	8	..	38414b
47	1333	46.8	+11 27	7.7	7.7	Ao	4	..	38200i	97	2102	47.0	-51 39	8.3	8.0	Fo	7	..	38414b
48	1835	46.8	-5 25	9.2	9.2	B9	3	..	20895b	98	779	47.0	-58 22	7.9	8.2	A2	6	3,4	13007b
49	1585	46.8	-8 9	9.1	10.1	Ko	1	..	20895b	99	656	47.0	-65 28	9.3	9.9	Go	2	..	15223b
50	1587	46.8	-8 21	9.8	10.6	G5	1	..	20895b	100	487	47.0	-71 17	8.9	10.0	K2	3	..	15167b

THE HENRY DRAPER CATALOGUE.

50200

6^h 47^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	488	47.0	- 71 51	9.9	10.0	A2	2	..	15167b	51	1839	47.3	- 5 31	7.15	7.10	B8	9	..	20895b
2	1568	47.1	+49 1	6.87	6.95	A3	8	..	37438i	52	1787	47.3	- 6 20	8.0	8.0	B9	9	..	20895b
3	1362	47.1	+45 19	9.5	10.3	G5	1	..	5400m	53	1786	47.3	- 7 0	9.2	9.2	A0	3	..	20895b
4	1638	47.1	+38 38	6.23	6.23	A0	5	R	38408i	54	1694	47.3	- 9 25	8.5	9.6	K2	2	..	20895b
5	1354	47.1	+30 35	8.4	8.4	A0	3	..	37527i	55	1667	47.3	-11 5	7.9	8.7	G5	8	..	24340b
6	1541	47.1	+ 8 31	7.9	8.3	F5	5	..	37652i	56	1665	47.3	-12 45	9.0	10.1	K2	1	..	24340b
7	1416	47.1	+ 6 20	8.3	9.1	G5	3	..	37652i	57	1664	47.3	-13 1	9.1	9.9	G5	1	..	24340b
8	1665	47.1	+ 0 35	8.9	9.9	K0	1	..	20867b	58	1621	47.3	-21 49	9.1	8.8	F0	4	..	12631b
9	1468	47.1	- 0 10	8.28	8.23	B8	4	..	20867b	59	1565	47.3	-22 59	9.8	9.5	G	2	E	24433b
10	1603	47.1	- 7 10	9.2	9.2	A	3	R	20895b	60	4480	47.3	-23 27	10.0	9.2	A5	3	..	24433b
11	1662	47.1	-12 48	9.2	9.2	A0	2	..	24340b	61	3703	47.3	-25 16	8.7	8.7	B8	6	..	20582b
12	4474	47.1	-23 45	10.7	9.4	F2	2	..	24433b	62	3701	47.3	-25 53	9.5	9.4	A3	3	..	20582b
13	3476	47.1	-26 57	9.7	9.9	K0	2	..	24433b	63	3517	47.3	-28 58	8.9	9.3	F2	4	..	24433b
14	3323	47.1	-27 33	10.9	9.9	G5	1	..	20582b	64	3557	47.3	-29 28	8.9	9.5	Go	2	..	20582b
15	3512	47.1	-28 12	9.2	9.3	F0	3	..	20582b	65	3556	47.3	-29 49	10.2	11.0	K0	1	..	24433b
16	3510	47.1	-28 36	7.9	8.4	A2	7	..	20582b	66	3599	47.3	-30 28	10.4	10.7	A3	1	..	24433b
17	3553	47.1	-29 50	9.0	9.8	K0	2	..	24433b	67	3181	47.3	-36 52	8.5	8.9	K0	4	..	20534b
18	3597	47.1	-30 43	9.7	11.0	A0	2	..	24433b	68	3118	47.3	-37 51	10.0	9.8	F0	2	..	20534b
19	3114	47.1	-37 23	10.2	10.6	K0	1	..	20534b	69	2708	47.3	-46 36	9.0	10.3	K0	1	..	38414b
20	2882	47.1	-39 32	10.0	10.1	A5	1	..	20534b	70	2414	47.3	-50 2	8.54	9.3	Go	5	..	38414b
21	2715	47.1	-40 48	8.4	8.3	B9	4	..	20556b	71	411	47.3	-74 19	9.6	9.9	F2	5	..	20652b
22	2704	47.1	-46 3	8.6	8.5	A2	7	..	38414b	72	415	47.3	-76 36	9.8	10.4	Go	3	..	20652b
23	2703	47.1	-46 31	5.05	6.6	F2	..	3,7	56,123	73	341	47.4	+72 4	7.7	8.7	K0	3	..	37559i
24	1363	47.2	+45 18	9.2	9.3	A2	3	..	5400m	74	1368	47.4	+50 42	8.2	9.2	K0	3	..	37419i
25	1613	47.2	+43 37	9.2	10.2	K0	3	..	5400m	75	1419	47.4	+21 51	8.6	9.6	K0	2	..	37441i
26	1549	47.2	+41 1	7.92	8.48	Go	4	E	37501i	76	1358	47.4	+15 12	8.5	9.0	F8	1	..	36977i
27	1523	47.2	+23 21	9.1	9.1	A0	2	..	38185i	77	1543	47.4	+ 8 30	5.76	5.90	A5	10	..	37652i
28	1493	47.2	+ 7 57	7.8	7.7	B5	6	..	37652i	78	1445	47.4	+ 3 22	8.7	8.8	A2	2	..	37652i
29	1565	47.2	+ 1 8	8.2	9.4	K5	3	..	20867b	79	1567	47.4	+ 1 13	8.5	8.5	B8	4	..	37652i
30	1470	47.2	- 0 33	8.7	8.5	B3	4	..	20867b	80	1805	47.4	- 2 13	9.1	9.1	B9	4	..	20867b
31	1418	47.2	- 1 25	9.6	9.7	A2	1	..	20867b	81	1844	47.4	- 5 3	6.77	7.84	K2	10	R	20895b
32	4478	47.2	-23 32	8.7	9.2	K5	3	..	24433b	82	1845	47.4	- 5 12	6.46	7.46	K0	10	..	20895b
33	3325	47.2	-27 8	7.9	9.4	K2	3	..	20582b	83	1842	47.4	- 5 27	9.4	9.4	B9	2	..	20895b
34	3515	47.2	-28 37	8.7	8.1	F0	4	R	20582b	84	1591	47.4	- 8 30	9.8	9.9	A3	1	..	20895b
35	3140	47.2	-34 15	5.06	7.1	K0	..	0,10	28,199	85	1668	47.4	-11 32	9.6	9.6	A0	2	..	24340b
36	3116	47.2	-38 1	10.9	10.4	A0	2	..	20534b	86	4520	47.4	-24 57	9.7	10.4	G5	1	..	24433b
37	2612	47.2	-47 59	10.2	10.3	G5	1	..	38414b	87	3481	47.4	-26 4	10.2	10.4	K2	1	..	24433b
38	2539	47.2	-48 6	9.6	9.6	F0	3	..	38414b	88	3482	47.4	-26 59	10.7	10.4	F8	1	..	24433b
39	2412	47.2	-50 51	8.6	10.5	K5	2	..	38414b	89	3326	47.4	-27 22	10.4	10.4	K2	1	..	20582b
40	1012	47.2	-52 28	9.3	9.3	A0	4	..	38414b	90	3329	47.4	-27 47	9.2	9.0	B9	4	..	20582b
41	720	47.2	-61 50	3.30	3.44	A5	..	0,4 R	28,199	91	3144	47.4	-34 10	8.0	8.9	K2	2	..	20534b
42	403	47.2	-75 28	9.4	10.2	G5	4	..	20652b	92	3142	47.4	-35 2	9.55	10.7	K5	1	..	20534b
43	1165	47.3	+56 45	8.6	8.6	A	4	R	37526i	93	2883	47.4	-39 22	9.0	9.2	A0	4	..	20534b
44	1431	47.3	+32 20	9.5	10.5	K0	..	..	36347i	94	639	47.4	-63 20	9.8	9.9	A2	1	..	15176b
45	1391	47.3	+29 38	8.0	9.0	K0	2	..	37527i	95	565	47.4	-70 56	7.9	7.9	A0	5	..	15167b
46	1519	47.3	+19 34	8.9	9.3	F5	2	..	37441i	96	227	47.4	-79 6	10.2	10.8	G	1	..	20652b
47	1417	47.3	+ 6 37	8.3	9.1	G5	2	..	37652i	97	457	47.5	+68 29	7.89	8.89	K0	3	..	38155i
48	1667	47.3	+ 0 25	9.6	9.7	A2	2	..	20867b	98	1427	47.5	+33 49	9.4	9.7	F0	2	..	37527i
49	1420	47.3	- 1 17	9.6	10.8	K5	1	..	20867b	99	1433	47.5	+31 15	7.8	8.6	G5	3	..	37527i
50	1700	47.3	- 4 41	9.6	9.7	A5	2	..	20895b	100	1544	47.5	+ 8 47	7.5	8.5	K0	3	..	37652i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

50300

6^h 47^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1806	47.5	- 2 57	8.5	8.5	Ao	7	..	20867b	51	1671	47.7	-11 40	9.8	9.9	A2	3	..	2434ob
2	1846	47.5	- 5 54	9.2	9.2	B8	4	..	20895b	52	1568	47.7	-22 11	8.0	8.3	G5	7	..	12631b
3	1654	47.5	-17 7	8.3	8.3	B9	7	0,2	18975b	53	4525	47.7	-25 0	10.7	10.2	F8	1	..	24433b
4	4485	47.5	-23 42	7.9	7.2	Ao	10	..	24433b	54	3708	47.7	-25 20	10.7	10.4	Ko	1	..	24433b
5	3332	47.5	-28 0	11.2	9.6	Go	1	..	20582b	55	3707	47.7	-25 38	9.5	8.7	B8	4	..	20582b
6	2955	47.5	-38 16	9.0	9.2	F2	4	..	20534b	56	3333	47.7	-27 3	9.5	10.1	Ko	2	..	24433b
7	2721	47.5	-40 30	10.2	9.6	A3	3	..	20534b	57	3524	47.7	-28 31	9.2	9.9	Ko	2	..	24433b
8	2712	47.5	-46 15	10.0	9.4	F5	3	..	38414b	58	3565	47.7	-29 16	7.9	8.6	Ko	4	..	20582b
9	2543	47.5	-49 0	10.2	10.5	G5	1	..	38414b	59	3606	47.7	-30 38	8.7	10.7	K5	1	..	24433b
10	2415	47.5	-50 30	2.83	3.83	Ko	..	R	28,199	60	2729	47.7	-40 12	9.0	9.9	F5	2	..	20534b
11	2416	47.5	-50 50	9.6	10.2	F8	2	..	38414b	61	2734	47.7	-43 34	9.2	8.9	Fo	4	..	20556b
12	714	47.5	-62 5	9.8	9.9	A5	2	R	18486b	62	306	47.8	+74 5	8.2	9.2	Ko	3	..	37559i
13	276	47.6	+75 5	8.17	8.67	F8	4	..	37343i	63	1450	47.8	+48 41	8.0	8.3	F2	3	..	37438i
14	1614	47.6	+43 56	9.9	11.0	K2	1	..	5400m	64	1550	47.8	+44 12	9.7	10.8	K2	1	..	5400m
15	1615	47.6	+43 4	7.27	7.35	A3	7	1,10	37501i	65	1616	47.8	+43 46	9.2	9.3	A2	5	1,3	5400m
16	1433	47.6	+32 38	6.89	6.87	B9	7	..	37527i	66	1434	47.8	+31 38	8.6	9.4	G5	1	..	37527i
17	1271	47.6	+28 31	8.0	8.4	F5	2	..	38185i	67	1440	47.8	+24 32	9.4	9.4	Ao	1	..	38185i
18	1508	47.6	+22 54	8.6	9.6	Ko	1	..	38185i	68	1442	47.8	+24 3	8.8	9.3	F8	2	..	38185i
19	1521	47.6	+19 23	7.5	7.6	A5	1	..	37441i	69	..	47.8	+22 56	..	..	Ma	..	..	M
20	1359	47.6	+15 57	8.3	8.3	B9	3	R	37441i	70	1422	47.8	+21 0	9.4	9.8	F5	2	..	37441i
21	1847	47.6	- 5 45	9.2	9.8	Go	1	..	20895b	71	1344	47.8	+11 7	6.30	7.08	G5	7	E	38200i
22	1737	47.6	-10 7	8.81	8.81	Ao	5	..	2434ob	72	1448	47.8	+ 2 52	7.7	8.5	G5	4	..	37652i
23	1670	47.6	-11 25	9.1	9.4	Fo	6	..	2434ob	73	1706	47.8	- 4 40	9.4	9.7	Fo	3	..	20895b
24	1667	47.6	-12 10	10.1	10.4	F	1	..	2434ob	74	1851	47.8	- 5 18	9.1	10.1	Ko	2	..	20895b
25	1694	47.6	-13 5	8.1	8.2	A2	4	..	8909b	75	1569	47.8	-22 5	9.4	9.2	Fo	2	..	12631b
26	1546	47.6	-15 5	9.26	10.26	Ko	3	..	18975b	76	4527	47.8	-24 40	9.7	10.4	G5	1	..	24433b
27	1545	47.6	-15 9	8.55	9.55	Ko	1	..	18975b	77	3713	47.8	-25 19	10.7	10.4	G5	1	..	24433b
28	1656	47.6	-17 11	9.4	9.7	Fo	1	..	18975b	78	3709	47.8	-25 22	11.8	10.4	Ao	2	..	24433b
29	1589	47.6	-19 9	8.5	9.2	G5	3	..	18975b	79	3495	47.8	-26 28	7.5	7.8	B5	8	..	20582b
30	3488	47.6	-26 26	7.4	7.8	A2	8	..	20582b	80	3493	47.8	-26 47	8.7	9.0	F5	6	..	24433b
31	3429	47.6	-32 5	8.0	7.7	Ao	8	E	20582b	81	2715	47.8	-46 51	10.0	9.4	A3	4	..	38414b
32	3171	47.6	-35 21	8.7	9.0	Fo	4	..	20534b	82	669	47.9	+63 18	9.5	9.8	F	2	..	37545i
33	2958	47.6	-38 6	10.4	10.1	A3	2	..	20534b	83	1166	47.9	+56 55	10.2	10.8	G	1	..	37526i
34	2776	47.6	-46 0	10.0	9.7	F2	4	..	38414b	84	1202	47.9	+45 57	6.48	7.48	Ko	..	0,7	56,83
35	2615	47.6	-47 18	10.2	9.4	Fo	3	..	38414b	85	1364	47.9	+45 27	9.2	9.3	A3	3	..	5400m
36	2544	47.6	-48 46	7.5	8.1	A2	7	..	38414b	86	1460	47.9	+ 5 23	9.3	9.3	B9	4	..	37652i
37	1168	47.6	-53 31	4.38	6.1	G5	..	5, R	28,199	87	1675	47.9	+ 0 19	9.3	9.3	B8	2	..	20867b
38	177	47.7	+83 9	9.2	10.2	Ko	1	..	38330i	88	1808	47.9	- 2 15	9.0	9.8	G5	3	..	20867b
39	608	47.7	+64 38	8.8	9.6	G5	2	..	37545i	89	1792	47.9	- 6 45	9.2	9.3	A2	3	..	20895b
40	1517	47.7	+35 26	8.6	8.6	B9	3	..	37527i	90	1594	47.9	- 8 58	9.4	9.7	Fo	2	..	20895b
41	1428	47.7	+33 8	8.4	8.4	B9	5	..	37527i	91	1697	47.9	-10 3	8.86	8.84	B9	4	..	2434ob
42	1434	47.7	+32 26	8.7	8.7	A	2	..	37527i	92	1742	47.9	-10 59	8.7	9.9	K5	2	..	2434ob
43	1310	47.7	+10 43	7.4	7.4	B9	6	E	38200i	93	1636	47.9	-16 16	8.9	8.9	B9	2	..	18975b
44	1424	47.7	+ 9 55	8.77	8.77	Ao	3	E	36977i	94	1570	47.9	-22 35	9.1	9.4	Ko	2	..	24433b
45	1673	47.7	+ 0 55	9.6	9.6	Ao	2	..	20867b	95	3293	47.9	-33 46	9.4	9.8	A2	2	..	20534b
46	1424	47.7	- 1 36	8.9	8.9	B8	4	..	20867b	96	3187	47.9	-36 22	9.4	9.5	F8	2	..	20534b
47	1423	47.7	- 1 51	9.1	9.4	F2	3	..	20867b	97	2716	47.9	-46 42	9.1	9.4	Ko	3	..	38414b
48	1630	47.7	- 3 34	8.9	8.8	B5	4	..	20895b	98	2110	47.9	-51 3	9.6	10.2	F2	2	..	38414b
49	1850	47.7	- 5 37	9.1	9.2	A2	3	..	20895b	99	890	48.0	+62 39	8.6	8.7	A5	3	..	37545i
50	1593	47.7	- 8 57	9.6	9.6	Ao	3	..	20895b	100	1369	48.0	+47 8	9.7	10.2	F8	2	..	5400m

THE HENRY DRAPER CATALOGUE.

50400

6^h 48^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1365	48.0	+45 46	8.5	8.5	Ao	6	0,3	5400m	51	709	48.2	-59 45	8.8	9.4	F5	2	..	15176b
2	1609	48.0	+37 4	7.6	8.8	K5	2	..	37527i	52	550	48.3	+65 25	8.5	8.9	F5	6	..	37545i
3	1510	48.0	+22 23	9.0	9.1	A2	1	..	38185i	53	1016	48.3	+57 31	9.5	10.3	G5	2	..	38239i
4	1550	48.0	+ 8 23	8.9	8.9	Ao	4	..	12670b	54	1552	48.3	+44 30	8.1	9.3	K5	4	0,1-	5400m
5	1428	48.0	- 1 46	9.3	9.3	Ao	3	..	20867b	55	1617	48.3	+43 37	9.5	10.1	Go	2	..	5400m
6	1809	48.0	- 2 56	8.9	10.1	K5	3	..	20867b	56	1387	48.3	+26 40	7.58	7.58	Ao	5	..	38185i
7	1743	48.0	-10 19	9.1	9.1	Ao	4	..	24340b	57	1533	48.3	+23 6	9.4	10.8	Ma	..	..	M
8	1668	48.0	-12 12	9.2	10.2	K	1	..	24340b	58	1573	48.3	+ 1 31	8.5	8.6	A3	2	..	37652i
9	1669	48.0	-12 16	9.4	9.4	Ao	3	..	24340b	59	1710	48.3	- 4 11	10.1	10.1	Ao	3	..	20895b
10	1658	48.0	-17 36	9.6	9.7	A2	2	..	18975b	60	1856	48.3	- 5 50	8.3	8.3	B9	7	..	20895b
11	4529	48.0	-24 49	9.7	9.6	A2	2	..	20582b	61	1614	48.3	- 7 39	7.7	7.7	B8	8	..	20895b
12	3340	48.0	-27 16	10.7	9.6	Ao	3	..	20582b	62	1673	48.3	-12 2	7.04	7.10	A2	5	..	8909b
13	2966	48.0	-38 32	9.4	9.6	A3	2	..	20534b	63	1638	48.3	-16 6	6.99	6.87	B5	4	..	8902b
14	2778	48.0	-42 6	7.3	8.3	K2	5	..	20556b	64	1587	48.3	-18 31	9.4	9.7	Fo	3	..	18975b
15	1014	48.0	-52 41	7.9	7.2	B9	6	..	10697b	65	4509	48.3	-24 0	9.7	9.2	Ao	5	2,2	24433b
16	404	48.0	-75 56	10.1	10.5	F5	2	..	20652b	66	4536	48.3	-24 55	9.70	9.7	F5	1	..	20582b
17	417	48.0	-76 18	9.4	10.5	K2	3	..	20652b	67	3508	48.3	-26 20	9.5	10.2	K2	1	..	24433b
18	196	48.0	-81 22	9.5	9.8	F2	4	..	20557b	68	3346	48.3	-27 32	10.7	9.6	Ao	3	..	20582b
19	475	48.1	+66 1	8.9	9.9	Ko	1	..	38155i	69	3576	48.3	-29 20	10.7	10.7	A2	2	..	24433b
20	1551	48.1	+44 2	6.04	6.32	Fo	10	..	37501i	70	3577	48.3	-29 35	8.9	9.5	K5	3	..	20582b
21	1474	48.1	- 0 43	9.1	9.4	Fo	1	..	20867b	71	3176	48.3	-35 57	9.3	9.0	A2	3	..	20534b
22	1429	48.1	- 1 28	9.6	9.6	B9	2	..	20867b	72	2970	48.3	-38 6	7.6	7.6	B8	8	..	20534b
23	1707	48.1	- 4 37	8.9	9.9	Ko	4	..	20895b	73	2967	48.3	-44 36	9.8	9.4	Ao	1	..	20556b
24	1699	48.1	- 9 53	9.1	9.1	B9	5	..	24340b	74	1129	48.3	-54 58	9.32	9.5	Ao	4	..	13007b
25	1571	48.1	-22 5	9.0	9.7	Ko	1	..	12631b	75	405	48.3	-75 49	9.7	10.7	Ko	2	..	20652b
26	3343	48.1	-27 52	8.7	9.4	G5	2	..	20582b	76	458	48.4	+68 53	7.62	8.12	F8	4	..	37559i
27	3572	48.1	-29 18	10.2	9.8	F8	2	..	20582b	77	671	48.4	+63 33	8.9	9.5	Go	3	..	37545i
28	2969	48.1	-38 57	10.7	9.8	A2	2	..	20534b	78	1751	48.4	+40 44	8.4	8.5	A2	1	E	37501i
29	2626	48.1	-47 20	10.0	9.8	Fo	2	..	38414b	79	1437	48.4	+32 37	8.0	9.0	Ko	2	R	37527i
30	710	48.1	-60 16	8.2	9.6	K2	1	..	15176b	80	..	48.4	+32 16	Nov.	Nov.	Pec.	..	R	76,36
31	566	48.1	-70 22	8.9	10.0	K2	1	..	15168b	81	1357	48.4	+29 57	7.91	7.86	B8	4	..	37527i
32	405	48.1	-73 9	9.9	10.0	A5	2	..	20652b	82	1426	48.4	+21 17	6.60	7.38	G5	6	..	37441i
33	1258	48.2	+27 35	8.6	8.6	Ao	2	..	38185i	83	1350	48.4	+11 9	7.7	8.3	Go	3	E	38200i
34	1477	48.2	+14 53	7.81	8.59	G5	2	..	36977i	84	1449	48.4	+ 3 32	8.7	8.7	Ao	4	..	37652i
35	1489	48.2	+ 4 18	8.1	9.2	K2	3	..	37652i	85	1435	48.4	- 1 6	10.3	10.3	A	2	..	20867b
36	1708	48.2	- 4 27	var.	var.	Nb	1	0,1 R	20895b	86	1857	48.4	- 5 33	9.2	9.2	B9	4	..	20895b
37	1700	48.2	- 9 15	8.9	9.2	F2	3	..	20895b	87	1795	48.4	- 6 38	8.5	9.5	Ko	6	..	20895b
38	1702	48.2	-10 0	8.76	9.76	Ko	2	..	24340b	88	1796	48.4	- 6 50	9.1	9.2	A2	2	..	20895b
39	1744	48.2	-10 12	9.6	10.2	Go	1	..	24340b	89	1674	48.4	-11 36	9.1	9.1	Ao	7	..	24340b
40	1660	48.2	-17 44	9.2	9.3	A2	3	..	18975b	90	1673	48.4	-12 28	9.6	9.6	A	1	..	24340b
41	1585	48.2	-18 4	10.1	10.2	A2	2	..	18975b	91	1630	48.4	-21 4	7.7	7.1	B8	4	5,8	8902b
42	1614	48.2	-20 43	8.9	9.9	Ko	1	..	12631b	92	4512	48.4	-23 31	9.5	9.1	Go	5	..	24433b
43	3505	48.2	-26 49	10.0	10.1	G5	2	..	24433b	93	4539	48.4	-24 20	9.7	9.9	G5	2	..	24433b
44	3575	48.2	-29 9	9.0	8.6	Ao	5	..	20582b	94	3722	48.4	-25 27	8.5	9.4	F8	4	..	20582b
45	3189	48.2	-36 7	6.00	6.8	A2	7	0,7	56,123	95	3533	48.4	-28 31	8.3	9.0	Ko	3	..	20582b
46	2734	48.2	-40 26	7.4	7.6	B9	4	1,9	18558b	96	3534	48.4	-28 32	9.5	8.8	Ao	3	..	20582b
47	2627	48.2	-47 59	10.2	9.7	A2	3	..	38414b	97	3580	48.4	-29 42	10.9	11.0	Go	2	..	24433b
48	2459	48.2	-49 52	9.6	9.9	Ko	3	..	38414b	98	3615	48.4	-30 18	7.8	8.0	Fo	8	..	20582b
49	1128	48.2	-54 53	9.8	9.8	A	2	..	13007b	99	3304	48.4	-33 48	7.19	8.0	Go	7	..	20534b
50	1075	48.2	-55 47	7.4	7.5	A5	9	..	13007b	100	2894	48.4	-39 7	9.4	9.9	Go	2	..	20534b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

50500

6^h 48^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2969	48.4	-44 21	8.2	8.8	K5	3	..	20556b	51	1017	48.7	+57 41	6.13	7.20	K2	8	..	37526i
2	2782	48.4	-45 55	10.5	10.0	Ao	2	..	38414b	52	1619	48.7	+43 51	9.7	10.9	K5	1	..	5400m
3	2628	48.4	-47 13	7.3	7.9	Ko	7	..	38414b	53	1388	48.7	+26 14	9.0	9.0	Ao	2	..	38185i
4	783	48.4	-58 52	9.0	10.5	Ko	1	..	13007b	54	1451	48.7	+24 23	6.84	7.34	F8	6	..	38185i
5	660	48.4	-69 11	10.0	10.0	A	1	..	15223b	55	1452	48.7	+23 58	8.7	9.1	F5	1	..	38185i
6	196	48.4	-80 42	5.64	5.9	A2	..	0.8 R	56,123	56	1325	48.7	+16 40	8.7	9.7	Ko	1	..	36977i
7	1618	48.5	+43 22	9.7	9.7	Ao	3	2,1	5400m	57	1427	48.7	+6 49	7.20	7.98	G5	4	..	37652i
8	1438	48.5	+31 31	9.0	9.8	G5	2	..	37527i	58	1451	48.7	+3 22	8.5	9.5	Ko	2	..	37700i
9	1525	48.5	+19 43	8.1	8.1	B8	5	..	37441i	59	1454	48.7	+2 15	9.6	9.6	Ao	3	..	20867b
10	1353	48.5	+11 43	8.7	8.8	A2	3	E	38200i	60	1478	48.7	-0 10	8.63	8.58	B8	5	..	20867b
11	1436	48.5	-1 32	10.3	10.3	B9	1	..	20867b	61	1701	48.7	-13 33	9.2	9.2	Ao	3	..	24340b
12	1811	48.5	-2 13	9.4	9.5	A2	2	..	20867b	62	1633	48.7	-21 43	8.5	8.2	B3	5	..	12631b
13	1705	48.5	-9 34	7.9	7.9	B8	8	..	20895b	63	4522	48.7	-23 46	10.0	9.4	F2	4	..	24433b
14	1678	48.5	-12 51	9.2	9.2	Ao	4	..	24340b	64	3519	48.7	-26 18	10.0	10.1	Ao	2	..	24433b
15	1592	48.5	-20 0	8.75	9.9	K2	2	..	12631b	65	3353	48.7	-27 27	11.2	10.4	Ko	1	..	24433b
16	3583	48.5	-29 8	10.2	9.8	Ao	2	..	20582b	66	3354	48.7	-27 50	8.7	8.5	Ao	7	..	20582b
17	3582	48.5	-30 0	10.2	11.0	Ko	2	..	24433b	67	3587	48.7	-29 23	9.7	11.0	Ma	2	..	24433b
18	3745	48.5	-31 54	7.5	7.6	A5	7	E	20582b	68	2974	48.7	-44 12	7.8	8.8	Ko	5	..	20556b
19	567	48.5	-68 19	8.8	9.1	F2	3	..	15223b	69	1018	48.7	-52 21	8.9	9.7	G5	3	..	38414b
20	672	48.6	+63 9	7.48	7.62	A5	7	3,7	37545i	70	1020	48.7	-52 54	9.8	9.9	A2	2	..	38414b
21	1033	48.6	+59 19	7.8	7.9	A2	7	..	37526i	71	712	48.7	-60 8	6.14	6.7	F5	10	..	15176b
22	982	48.6	+58 33	4.54	5.10	Go	10	R	37526i	72	529	48.7	-72 28	9.4	10.0	Go	1	..	15168b
23	1553	48.6	+44 47	9.9	11.1	K5	1	..	5400m	73	228	48.7	-79 30	9.2	9.8	Go	5	..	20652b
24	1753	48.6	+40 41	8.24	8.24	Ao	3	E	37501i	74	229	48.7	-80 1	8.99	9.5	Ao	5	..	20557b
25	1315	48.6	+10 39	7.9	9.1	K5	2	..	38200i	75	308	48.8	+74 0	8.8	9.8	Ko	2	..	37559i
26	1426	48.6	+6 57	8.1	8.1	B9	4	..	37652i	76	1641	48.8	+38 2	6.67	7.67	Ko	3	5,8	38408i
27	1450	48.6	+3 4	9.3	9.3	A	2	..	37652i	77	1441	48.8	+31 3	8.6	9.4	G5	1	..	37527i
28	1577	48.6	+1 32	8.8	8.8	B9	4	..	37652i	78	1441	48.8	+17 49	8.2	9.3	K2	2	..	37441i
29	1685	48.6	+0 51	8.19	8.33	A5	3	..	37652i	79	1367	48.8	+15 34	8.8	8.8	Ao	2	..	36977i
30	1686	48.6	+0 1	9.3	9.3	B9	2	..	20867b	80	1481	48.8	+14 45	7.8	7.8	B9	4	..	37441i
31	1476	48.6	-0 24	8.7	9.3	Go	1	..	20867b	81	1428	48.8	+6 49	7.34	7.34	Ao	6	..	37652i
32	1477	48.6	-0 52	8.9	9.7	G5	1	..	20867b	82	1687	48.8	+0 42	8.9	9.4	F8	3	..	20867b
33	1675	48.6	-11 6	8.3	8.3	Ao	8	..	24340b	83	1479	48.8	-0 11	7.83	7.81	B9	5	..	20867b
34	1663	48.6	-17 30	8.7	8.8	A3	6	..	18975b	84	1480	48.8	-0 36	8.9	9.3	F5	1	..	20867b
35	1574	48.6	-22 56	8.1	7.3	B9	8	..	12631b	85	1637	48.8	-4 3	10.1	10.1	A	1	..	20895b
36	4546	48.6	-24 12	10.9	10.2	A2	2	..	24433b	86	1860	48.8	-5 3	8.90	8.98	A3	3	..	20895b
37	3727	48.6	-25 9	9.7	10.2	Go	1	..	24433b	87	1859	48.8	-5 27	10.1	10.1	A	1	..	20895b
38	3730	48.6	-26 0	7.12	8.7	K5	6	..	20582b	88	1799	48.8	-6 51	9.1	8.7	F5	3	..	20895b
39	3726	48.6	-26 1	10.7	8.7	Ao	2	..	20582b	89	1593	48.8	-19 12	8.3	8.8	F2	4	..	12631b
40	3516	48.6	-26 16	9.5	9.1	B9	3	..	20582b	90	1576	48.8	-22 59	9.2	9.7	Ko	2	..	12631b
41	3518	48.6	-26 55	10.4	9.7	F5	2	..	24433b	91	4525	48.8	-23 51	10.2	9.4	F8	3	..	24433b
42	3352	48.6	-27 39	8.7	9.0	F5	4	..	20582b	92	4523	48.8	-23 54	10.9	9.7	Ao	3	..	24433b
43	3536	48.6	-28 59	8.1	9.6	Ma	3	..	20582b	93	3525	48.8	-26 54	11.8	9.7	Ao	2	..	24433b
44	3133	48.6	-37 59	10.7	10.1	Fo	1	..	20534b	94	3589	48.8	-29 50	10.4	11.0	K5	1	..	24433b
45	2973	48.6	-38 31	8.4	8.0	B8	7	..	20534b	95	3747	48.8	-31 6	9.0	9.5	A3	2	E	24433b
46	2722	48.6	-46 19	9.8	9.7	A2	3	..	38414b	96	3160	48.8	-34 22	8.4	9.8	K2	2	..	20534b
47	2723	48.6	-46 42	8.9	9.4	K2	2	..	38414b	97	3184	48.8	-35 10	8.35	8.0	A2	7	..	20534b
48	1078	48.6	-55 38	8.8	8.6	B9	5	..	13007b	98	2785	48.8	-42 59	7.9	8.6	G5	5	..	20556b
49	605	48.6	-66 2	8.7	9.9	K5	2	..	15223b	99	2639	48.8	-47 38	8.9	9.1	F5	5	..	38414b
50	412	48.6	-74 8	10.2	10.5	F2	3	..	20652b	100	2425	48.8	-50 25	10.5	10.8	Fo	2	..	38414b

THE HENRY DRAPER CATALOGUE.

50600

6^h 48^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	491	48.8	-72 0	9.1	9.7	Go	3	..	15167b	51	3309	49.0	-33 9	9.0	8.9	F8	5	..	18926b
2	418	48.8	-76 49	10.1	10.5	F5	1	..	20652b	52	3137	49.0	-37 44	8.7	9.0	G5	4	..	20534b
3	358	48.9	+73 47	9.2	9.8	G	1	..	37559i	53	2983	49.0	-38 30	8.4	8.1	A2	7	..	20534b
4	1620	48.9	+43 34	9.0	10.0	Ko	3	0,1	5400m	54	2466	49.0	-49 54	10.0	9.9	Fo	3	..	38414b
5	1788	48.9	+39 40	7.97	7.97	Ao	1	..	38408i	55	1179	49.0	-56 50	8.7	9.8	G5	2	..	13007b
6	1442	48.9	+31 53	8.7	9.3	Go	2	..	37527i	56	985	49.1	+58 3	9.0	9.0	Ao	3	..	37526i
7	1326	48.9	+15 58	6.56	7.34	G5	7	..	37441i	57	1258	49.1	+51 7	8.0	8.1	A2	7	..	37419i
8	1355	48.9	+11 11	7.8	7.8	Ao	5	E	38200i	58	1203	49.1	+46 25	5.80	5.75	B8	10	R	37438i
9	1455	48.9	+2 42	8.9	9.0	A2	2	..	37652i	59	1554	49.1	+44 47	8.5	8.6	A2	5	2,7	37501i
10	1481	48.9	-0 19	8.7	8.7	Ao	3	..	20867b	60	1755	49.1	+40 53	8.6	8.6	Ao	4	E	37501i
11	1800	48.9	-6 57	9.2	9.2	B9	4	..	20895b	61	1522	49.1	+34 59	8.42	9.49	K2	1	..	37527i
12	1710	48.9	-9 53	9.0	10.2	K5	2	..	20895b	62	1359	49.1	+30 18	8.1	8.7	Go	3	..	37527i
13	1680	48.9	-12 11	9.6	10.0	F5	2	..	24340b	63	1392	49.1	+26 40	9.4	9.5	A2	1	..	38185i
14	3527	48.9	-26 10	10.9	9.7	Ao	3	..	24433b	64	1442	49.1	+17 6	8.4	9.5	K2	1	..	37441i
15	3360	48.9	-27 59	10.2	9.3	A2	3	..	20582b	65	1321	49.1	+10 49	8.7	9.1	F5	2	E	38200i
16	3542	48.9	-28 39	9.5	10.4	G5	1	..	24433b	66	1466	49.1	+5 47	8.3	8.3	B9	4	..	37652i
17	3592	48.9	-29 5	9.7	9.0	Ao	2	..	20582b	67	1482	49.1	-0 5	9.13	9.13	Ao	3	..	20867b
18	3447	48.9	-32 22	8.7	8.3	A3	4	E	18926b	68	1439	49.1	-1 30	9.6	9.6	Ao	1	..	20867b
19	2982	48.9	-39 1	10.4	10.4	A	1	..	20534b	69	1440	49.1	-1 41	8.7	9.3	Go	2	..	20867b
20	2641	48.9	-47 13	9.8	9.1	A3	4	..	38414b	70	1816	49.1	-2 36	9.0	10.0	Ko	3	..	20867b
21	2556	48.9	-48 11	6.23	7.6	Ko	10	..	38414b	71	1716	49.1	-4 13	9.6	10.6	Ko	2	..	20895b
22	2465	48.9	-49 11	7.5	7.3	A2	3	2,9	9026b	72	1620	49.1	-7 58	8.9	9.0	A3	4	..	20895b
23	2428	48.9	-50 37	10.5	10.2	Fo	2	..	38414b	73	1712	49.1	-9 8	9.2	9.3	A2	4	..	20895b
24	1065	48.9	-57 16	8.8	9.0	F2	3	..	13007b	74	1678	49.1	-11 8	7.7	8.7	Ko	6	..	24340b
25	785	48.9	-58 39	10.4	10.7	F2	1	..	13007b	75	1677	49.1	-11 33	9.1	9.4	Fo	4	..	24340b
26	280	48.9	-77 8	9.0	9.6	Go	5	..	20652b	76	1644	49.1	-16 44	8.5	8.6	A3	2	..	8909b
27	281	48.9	-77 39	10.5	10.5	Ao	2	..	20652b	77	1595	49.1	-18 19	8.1	8.2	A2	7	0,2	18975b
28	230	48.9	-79 25	10.2	10.3	A2	3	..	20652b	78	1596	49.1	-19 15	8.1	8.0	Ao	7	..	12631b
29	231	49.0	+81 21	9.0	9.8	G5	1	..	38330i	79	4533	49.1	-23 39	10.7	8.9	A5	5	..	24433b
30	609	49.0	+64 44	8.4	9.2	G5	5	..	37545i	80	4532	49.1	-23 59	8.7	7.4	B8	6	..	20582b
31	984	49.0	+58 26	9.2	10.4	K5	1	..	37526i	81	3739	49.1	-25 26	9.3	10.1	Ko	3	..	24433b
32	1264	49.0	+27 29	8.8	9.1	Fo	2	..	38185i	82	3741	49.1	-25 33	10.2	10.1	G5	2	..	24433b
33	1515	49.0	+22 41	7.9	8.0	A2	5	..	37441i	83	3366	49.1	-27 19	9.2	9.3	Ko	2	..	20582b
34	1428	49.0	+21 41	6.81	6.79	B9	8	..	37441i	84	3139	49.1	-38 2	9.6	10.6	G5	1	..	20534b
35	1462	49.0	+13 18	4.70	4.98	Fo	..	R	56,83	85	2560	49.1	-48 52	8.8	9.3	F8	4	..	38414b
36	1465	49.0	+5 15	7.8	7.8	B8	5	..	37652i	86	419	49.1	-76 57	9.7	10.5	G5	2	..	20652b
37	1714	49.0	-4 16	8.3	9.5	K5	5	..	20895b	87	459	49.2	+68 29	9.2	10.2	Ko	1	..	38155i
38	1715	49.0	-4 46	9.0	9.4	F5	5	..	20895b	88	1015	49.2	+60 55	7.62	8.12	F8	6	..	37526i
39	1711	49.0	-9 23	6.93	7.35	F5	9	..	20895b	89	1017	49.2	+60 43	8.8	10.0	K5	2	..	37526i
40	1705	49.0	-13 35	9.0	9.3	F2	4	..	24340b	90	1034	49.2	+59 20	8.6	8.9	Fo	4	..	37526i
41	1627	49.0	-14 29	8.9	9.7	G5	3	..	24340b	91	1373	49.2	+50 8	9.4	9.4	A	1	E	37515i
42	1593	49.0	-18 38	9.2	9.7	F8	3	..	18975b	92	1496	49.2	+25 30	5.77	6.33	Go	7	..	38185i
43	1594	49.0	-18 48	6.16	6.22	A2	..	1,7-	28,199	93	1431	49.2	+21 44	9.0	9.0	Ao	3	..	37441i
44	1591	49.0	-18 55	5.62	5.90	Fo	..	0,8-	28,199	94	1356	49.2	+11 34	8.1	8.7	Go	3	E	38200i
45	1594	49.0	-19 28	8.3	8.8	Fo	5	..	12631b	95	1504	49.2	+7 50	8.4	8.4	Ao	3	..	12670b
46	4551	49.0	-24 2	7.4	7.5	B3	8	..	20582b	96	1691	49.2	+0 18	8.4	8.2	B	4	R	20867b
47	4550	49.0	-24 47	9.0	8.7	B8	4	..	20582b	97	1484	49.2	-0 30	8.9	9.0	A2	3	..	20867b
48	3529	49.0	-26 50	6.52	8.1	Mb	9	..	20582b	98	1638	49.2	-3 26	9.1	9.1	Ao	3	..	20895b
49	3361	49.0	-27 23	10.9	10.2	G5	2	..	24433b	99	1862	49.2	-5 28	10.1	10.1	B8	3	..	20895b
50	3362	49.0	-27 31	11.6	10.2	Ao	1	..	24433b	100	1863	49.2	-5 44	6.35	6.43	A3	10	..	20895b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

50700

6^h 49^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1802	49.2	— 6 40	9.4	10.4	Ko	1	..	20895b	51	1808	49.4	— 6 16	7.9	7.9	B8	9	..	20895b
2	1803	49.2	— 6 48	8.7	8.7	B8	8	..	20895b	52	1809	49.4	— 6 29	9.2	9.2	Ao	2	..	20895b
3	1714	49.2	— 9 55	8.76	9.4	Ao	1	R	2434ob	53	1598	49.4	— 19 48	9.4	9.7	G5	1	..	12631b
4	1716	49.2	— 9 55		9.2	A2	2			54	3748	49.4	— 26 1	10.7	10.4	F8	1	..	24433b
5	1709	49.2	— 13 4	7.7	7.7	B8	4	..	8909b	55	2988	49.4	— 38 32	9.4	9.8	Go	3	..	20534b
6	1597	49.2	— 19 37	9.1	9.2	F2	2	..	12631b	56	2791	49.4	— 42 45	9.0	9.5	G5	2	..	20556b
7	1616	49.2	— 20 6	4.66	4.44	B1	..	I, IO	28,199	57	2430	49.4	— 50 48	10.2	10.8	G5	1	..	38414b
8	1617	49.2	— 20 23	9.4	9.3	Ao	2	2,2	39936b	58	129	49.4	— 83 5	8.7	8.7	Ao	5	..	20557b
9	1636	49.2	— 21 56	8.6	8.4	A2	4	..	12631b	59	..	49.5	+ 73 19	..	..	F5	1	..	37559i
10	1578	49.2	— 22 51	8.9	9.1	F5	3	..	12631b	60	429	49.5	+ 70 30	8.9	9.4	F8	2	..	38155i
11	4553	49.2	— 24 34	7.49	7.3	A2	..	O, R	28,199	61	986	49.5	+ 58 44	8.8	9.3	F8	4	..	37526i
12	3535	49.2	— 26 34	10.0	9.7	Ko	1	..	20582b	62	1375	49.5	+ 50 2	9.32	9.60	F	1	E	37515i
13	3599	49.2	— 29 43	9.7	9.8	F8	2	..	24433b	63	1205	49.5	+ 46 49	6.03	7.03	Ko	7	O, IO	37438i
14	2119	49.2	— 51 42	10.2	9.7	A2	3	..	38414b	64	1623	49.5	+ 42 54	9.2	10.2	Ko	1	..	37501i
15	1181	49.2	— 56 8	8.6	9.2	Go	6	R	13007b	65	1361	49.5	+ 30 50	8.7	9.0	Fo	2	..	37527i
16	664	49.2	— 67 14	8.5	9.3	G5	4	..	15223b	66	1269	49.5	+ 27 23	8.2	8.3	A2	5	..	38185i
17	1372	49.3	+ 46 58	10.2	11.2	K	1	..	5400m	67	1457	49.5	+ 24 8	7.67	7.50	B3	4	..	38185i
18	1204	49.3	+ 46 40	8.0	8.0	Ao	7	O,4	5400m	68	1486	49.5	+ 14 22	8.4	9.4	K	1	..	36977b
19	1555	49.3	+ 44 21	9.5	10.6	K2	2	..	5400m	69	1432	49.5	+ 9 38	8.5	8.6	A2	3	E	36977i
20	1757	49.3	+ 40 41	7.56	7.98	F5	5	E	37501i	70	1508	49.5	+ 7 37	8.3	8.3	B9	3	..	37652i
21	1518	49.3	+ 22 14	8.8	9.8	Ko	2	..	38185i	71	1509	49.5	+ 7 32	8.3	8.4	A2	4	..	37652i
22	1344	49.3	+ 12 6	7.7	8.1	F5	4	E	38200i	72	1469	49.5	+ 5 2	8.56	8.56	Ao	2	..	37652i
23	1325	49.3	+ 10 41	8.3	9.1	G5	1	E	38200i	73	1488	49.5	— 0 19	8.9	9.0	A2	3	..	20867b
24	1505	49.3	+ 7 10	8.5	8.5	Ao	4	..	12670b	74	1641	49.5	— 3 58	8.1	8.1	Ao	8	..	20895b
25	1432	49.3	+ 6 51	7.08	7.16	A3	6	..	37652i	75	1624	49.5	— 7 16	8.3	9.4	K2	5	..	20895b
26	1502	49.3	+ 4 36	8.3	9.3	Ko	2	..	37652i	76	1605	49.5	— 8 23	10.1	10.1	A	1	..	20895b
27	1442	49.3	— 1 32	8.9	8.9	B9	3	..	20867b	77	1721	49.5	— 9 29	7.81	8.99	K5	4	..	20895b
28	1718	49.3	— 4 9	9.1	9.6	F8	2	..	20895b	78	1681	49.5	— 11 55	4.25	5.32	K2	..	3,8 R	56,83
29	1719	49.3	— 4 47	9.1	9.2	A3	4	..	20895b	79	1580	49.5	— 22 19	9.6	9.2	F2	2	..	12631b
30		49.3	— 5 53			Ko				80	4543	49.5	— 23 47	11.2	9.2	Ao	3	..	24433b
31	1864	49.3	— 5 53	7.9	8.9	A3	5	R	20895b	81	4559	49.5	— 24 16	8.5	9.0	F8	5	..	20582b
32	1805	49.3	— 6 11	9.1	9.9	G5	2	..	20895b	82	3375	49.5	— 27 44	8.3	9.0	Ko	4	..	20582b
33	1806	49.3	— 6 15	9.1	9.5	F5	2	..	20895b	83	3204	49.5	— 36 33	9.0	9.0	F5	3	..	20534b
34	1804	49.3	— 6 59	8.9	9.7	G5	3	..	20895b	84	3143	49.5	— 37 50	10.4	10.1	F8	1	..	20534b
35	1604	49.3	— 8 39	8.3	8.6	Fo	6	..	20895b	85	2793	49.5	— 42 23	6.48	7.3	F2	3	O,9	8969b
36	1717	49.3	— 9 12	8.9	9.9	Ko	2	..	20895b	86	2982	49.5	— 44 56	8.80	8.8	F8	5	..	38414b
37	1710	49.3	— 13 3	9.0	8.8	B	4	R	2434ob	87	2794	49.5	— 45 56	8.3	8.5	Go	6	..	38414b
38	1714	49.3	— 13 39	9.8	9.8	Ao	2	..	2434ob	88	2731	49.5	— 46 42	10.0	9.7	Ao	3	..	38414b
39	1712	49.3	— 13 54	8.9	8.9	Ao	7	..	2434ob	89	2471	49.5	— 49 35	9.8	11.1	Ko	1	..	38414b
40	4537	49.3	— 23 58	9.3	8.4	B9	5	..	20582b	90	987	49.6	+ 58 51	8.6	9.4	G5	3	..	37526i
41	3371	49.3	— 27 45	9.5	9.6	G5	1	..	20582b	91	1494	49.6	+ 34 32	8.7	8.7	B9	3	..	37527i
42	2729	49.3	— 46 14	10.0	10.5	K2	1	..	38414b	92	1370	49.6	+ 15 49	8.2	8.3	A2	2	..	37441i
43	1035	49.4	+ 59 7	9.2	10.0	G5	2	..	38239i	93	1557	49.6	+ 8 39	7.9	8.9	Ko	2	..	37652i
44	1085	49.4	+ 52 59	8.6	9.0	F5	2	..	37419i	94	1458	49.6	+ 3 23	8.3	8.6	Fo	5	..	37652i
45	1528	49.4	+ 36 52	8.6	8.7	A5	3	..	37527i	95	1721	49.6	— 4 35	9.4	9.8	F5	5	..	20895b
46	1457	49.4	+ 2 44	8.1	8.6	F8	3	..	37652i	96	1686	49.6	— 12 45	8.9	9.0	A2	3	..	2434ob
47	1487	49.4	— 1 0	5.33	5.39	A2	10	..	37700i	97	1718	49.6	— 13 30	8.1	8.5	F5	2	..	8909b
48	1443	49.4	— 1 31	8.9	8.9	B9	4	..	20867b	98	1717	49.6	— 13 37	8.7	9.0	Fo	5	..	2434ob
49	1820	49.4	— 2 36	9.2	9.2	B8	4	..	20867b	99	1632	49.6	— 15 0	9.4	9.4	Ao	2	..	18975b
50	1807	49.4	— 6 5	8.9	10.1	K5	1	..	20895b	100	1631	49.6	— 15 1	9.6	9.6	A	1	..	18975b

THE HENRY DRAPER CATALOGUE.

50800

6^h 49^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1596	49.6	-18 26	8.7	8.7	B ₉	5	..	18975b	51	1641	49.8	-21 22	9.1	9.2	G ₀	2	..	12631b
2	1640	49.6	-21 45	7.9	8.3	A ₂	7	..	12631b	52	1583	49.8	-22 28	9.1	8.9	K ₀	3	o,3	12631b
3	4546	49.6	-23 43	11.6	9.8	A ₀	2	..	24433b	53	4565	49.8	-24 25	6.20	6.8	A ₀	..	o, R	28,199
4	4563	49.6	-24 7	7.31	7.9	A ₃	8	..	20582b	54	3760	49.8	-25 18	9.0	9.6	A ₀	4	..	24433b
5	3756	49.6	-25 26	10.2	9.7	A ₀	3	..	24433b	55	3762	49.8	-25 49	10.7	9.7	B ₉	2	..	20582b
6	3554	49.6	-28 24	6.03	7.0	G ₀	10	..	20582b	56	3380	49.8	-27 18	10.7	10.4	G ₅	1	..	24433b
7	2990	49.6	-38 55	9.0	9.5	G ₅	4	..	20534b	57	2912	49.8	-39 34	8.0	9.5	K ₂	3	..	20534b
8	2753	49.6	-40 35	7.4	8.0	K ₀	4	..	20556b	58	2754	49.8	-40 23	8.7	9.8	K ₀	3	o,1	20534b
9	1134	49.6	-54 15	8.6	9.5	K ₅	2	..	13007b	59	2795	49.8	-42 35	9.2	9.0	F ₀	3	..	20556b
10	1081	49.6	-55 28	9.1	9.0	F ₅	3	..	13007b	60	2756	49.8	-43 51	6.50	6.6	B ₉	4	..	8969b
11	460	49.7	+68 41	9.5	9.9	F ₅	2	..	38155i	61	713	49.8	-59 11	9.5	9.6	A ₃	3	..	13007b
12	1149	49.7	+52 23	9.5	9.6	A ₃	2	..	37419i	62	608	49.8	-66 11	6.99	8.1	G ₅	7	..	15223b
13	1556	49.7	+44 48	8.22	9.40	K ₅	4	3,1	5400m	63	921	49.9	+61 42	9.2	9.6	F ₅	3	..	37526i
14	1441	49.7	+32 3	8.8	9.8	K ₀	1	..	37527i	64	922	49.9	+61 29	8.6	9.1	F ₈	4	..	37526i
15	1363	49.7	+30 39	9.4	9.5	A ₅	2	..	37527i	65	1373	49.9	+47 24	7.9	8.0	A ₂	3	..	37438i
16	1270	49.7	+27 25	6.97	6.95	B ₉	7	..	38185i	66	1622	49.9	+43 52	9.5	9.5	A ₀	4	2,1	5400m
17	1435	49.7	+9 47	8.3	8.4	A ₅	3	E	36977i	67	1437	49.9	+6 2	8.2	8.7	F ₈	5	..	37652i
18	1513	49.7	+7 24	7.7	8.7	K ₀	2	..	37652i	68	1472	49.9	+5 34	8.1	8.0	B ₅	5	..	37652i
19	1460	49.7	+2 11	8.1	9.1	K ₀	6	5,3	20867b	69	1450	49.9	-2 1	9.6	9.6	A ₀	2	..	20867b
20	1446	49.7	-1 38	6.25	6.13	B ₅	10	..	20867b	70	1642	49.9	-3 13	9.1	9.4	F ₀	4	..	20895b
21	1723	49.7	-4 14	9.2	10.0	G ₅	1	..	20895b	71	1814	49.9	-6 15	9.1	9.1	B ₈	4	..	20895b
22	1625	49.7	-7 5	9.4	9.5	A ₃	3	..	20895b	72	1813	49.9	-6 35	9.8	10.2	F ₅	2	..	20895b
23	1610	49.7	-8 51	8.9	9.9	K ₀	1	..	20895b	73	1612	49.9	-8 53	9.6	9.7	A ₂	1	..	20895b
24	1723	49.7	-9 3	9.1	9.4	F ₀	2	..	20895b	74	1725	49.9	-9 17	9.4	9.4	A ₀	2	..	20895b
25	1668	49.7	-17 47	8.1	8.1	B ₈	2	..	8902b	75	1684	49.9	-11 15	8.7	9.0	F ₀	6	..	24340b
26	1582	49.7	-22 12	7.7	8.4	K ₂	5	..	12631b	76	1635	49.9	-14 19	7.9	8.0	A ₂	3	..	8909b
27	3759	49.7	-25 3	10.4	10.2	A ₂	2	..	24433b	77	4567	49.9	-24 4	4.12	7.0	K _{2p}	..	o,7 R	28,199
28	3557	49.7	-28 52	10.9	10.5	A ₀	1	..	24433b	78	3765	49.9	-25 25	9.5	10.2	K ₀	3	..	24433b
29	3767	49.7	-31 5	8.7	9.0	A ₀	4	E	24433b	79	3763	49.9	-25 43	9.0	9.7	K ₅	2	..	20582b
30	3769	49.7	-31 39	9.0	9.5	F ₈	2	E	24433b	80	3544	49.9	-26 45	9.2	9.1	F ₀	5	..	20582b
31	3207	49.7	-36 37	8.4	8.3	F ₀	6	..	20534b	81	3646	49.9	-30 16	9.5	9.8	A ₀	3	..	24433b
32	3206	49.7	-36 55	8.7	9.2	G ₅	2	..	20534b	82	2799	49.9	-42 31	7.6	7.2	F ₂	7	..	20556b
33	2992	49.7	-38 51	8.7	10.1	K ₀	2	..	20534b	83	2733	49.9	-46 41	7.9	8.0	G ₅	4	..	38414b
34	2646	49.7	-47 18	9.1	8.6	A ₂	5	..	38414b	84	670	49.9	-67 34	9.1	9.5	F ₅	3	..	15223b
35	231	49.7	-79 57	9.44	10.8	K ₅	2	..	20652b	85	430	50.0	+70 57	5.83	6.83	K ₀	8	..	37559i
36	610	49.8	+64 47	9.00	10.07	K ₂	1	..	37545i	86	476	50.0	+66 30	9.7	10.5	G ₅	1	..	38155i
37	611	49.8	+64 8	9.7	10.7	K	1	..	37545i	87	1405	50.0	+18 37	7.6	7.7	A ₅	5	..	37441i
38	988	49.8	+58 2	8.1	8.4	F ₀	6	..	37526i	88	1461	50.0	+3 36	8.4	9.2	G ₅	4	..	37652i
39	1572	49.8	+49 19	8.6	9.4	G ₅	2	..	37438i	89	1700	50.0	+0 28	10.3	10.3	A ₀	2	..	20867b
40	1624	49.8	+42 41	9.4	9.4	A ₀	1	..	37501i	90	1827	50.0	-2 41	6.00	7.00	K ₀	10	..	20867b
41	1442	49.8	+32 33	8.7	9.5	G ₅	2	..	37527i	91	1643	50.0	-3 34	9.2	..	Oe ₅	3	..	20867b
42	1403	49.8	+29 39	8.6	9.7	K ₂	1	..	37478i	92	1868	50.0	-5 43	8.7	9.9	K ₅	1	..	20895b
43	1506	49.8	+4 46	8.30	9.30	K ₀	2	..	37700i	93	1753	50.0	-10 58	9.1	9.1	A ₀	5	..	24340b
44	1489	49.8	-0 57	8.9	9.0	A ₂	3	..	20867b	94	1719	50.0	-13 37	8.1	8.1	A ₀	3	..	8909b
45	1447	49.8	-1 10	8.3	9.3	K ₀	3	..	20867b	95	1585	50.0	-22 59	9.6	8.9	B ₉	2	..	12631b
46	1449	49.8	-1 15	8.3	8.2	B ₅	5	..	20867b	96	4553	50.0	-23 48	6.55	6.9	Ob	..	o,4 R	28,199
47	1812	49.8	-6 30	9.1	10.1	K ₀	2	..	20895b	97	3545	50.0	-26 28	9.5	9.3	A ₃	3	..	20582b
48	1687	49.8	-12 23	9.6	9.6	A ₀	2	..	24340b	98	3648	50.0	-30 36	9.0	9.8	F ₈	2	..	24433b
49	1633	49.8	-14 7	8.9	8.9	B ₉	5	..	24340b	99	3175	50.0	-34 33	9.4	9.5	F ₀	3	..	20534b
50	1598	49.8	-18 10	9.1	9.1	B _{8p}	3	R	18975b	100	3177	50.0	-34 37	9.0	9.8	G	1	..	20534b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

50900

6^h 50^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2756	50.0	-40 12	9.4	9.8	Ko	2	..	20534b	51	1408	50.3	+18 56	7.4	7.4	B9	5	..	37441i
2	2736	50.0	-46 23	9.8	10.0	Ko	1	..	38414b	52	1439	50.3	+9 7	8.1	8.2	A2	4	..	37652i
3	788	50.0	-58 13	8.0	7.8	B9	6	..	13007b	53	1564	50.3	+8 3	8.7	8.7	A	2	..	37652i
4	466	50.1	+67 27	6.54	7.32	G5	8	..	37545i	54	1463	50.3	+2 42	8.7	8.7	A	2	..	37652i
5	1623	50.1	+43 56	9.5	9.6	A2	5	0,1	5400m	55	1705	50.3	+0 29	8.5	9.6	K2	3	..	20867b
6	1625	50.1	+42 5	8.4	8.8	F5	2	..	37501i	56	1685	50.3	-11 28	9.6	9.7	A2	4	..	2434ob
7	1520	50.1	+7 34	8.3	9.3	K	1	..	37652i	57	1686	50.3	-11 35	9.1	10.2	K2	4	..	2434ob
8	1438	50.1	+6 25	9.3	10.3	K	1	..	37652i	58	1722	50.3	-14 1	8.0	9.4	Ma	4	..	2434ob
9	1701	50.1	+0 21	8.7	9.8	K2	2	..	20867b	59	1637	50.3	-14 44	7.36	7.86	F8	3	..	8909b
10	1692	50.1	-12 33	9.0	9.0	Ao	3	..	2434ob	60	1603	50.3	-19 33	9.6	9.2	Fo	3	..	12631b
11	1649	50.1	-16 38	8.3	9.5	K5	3	..	18975b	61	1604	50.3	-19 41	9.4	9.5	F2	3	..	12631b
12	1600	50.1	-18 16	9.2	9.3	A2	3	..	18975b	62	3624	50.3	-29 6	10.2	11.0	Ko	1	..	24433b
13	1601	50.1	-19 20	9.1	9.7	G5	1	..	18975b	63	3216	50.3	-36 31	10.9	9.8	Ao	1	..	20534b
14	1586	50.1	-22 19	8.3	8.7	Ko	4	..	12631b	64	2805	50.3	-42 6	8.5	9.2	Ko	3	..	20556b
15	1587	50.1	-22 40	10.1	9.2	A2	2	..	24433b	65	2574	50.3	-48 15	10.2	10.8	G5	1	..	38414b
16	3769	50.1	-25 57	9.5	9.1	A2	4	..	20582b	66	723	50.3	-62 57	9.0	10.1	K2	1	..	15176b
17	3384	50.1	-27 38	8.7	8.1	Ao	7	..	20582b	67	533	50.3	-72 6	9.3	10.3	K	1	..	15168b
18	3566	50.1	-28 4	10.9	9.6	F8	2	..	20582b	68	414	50.3	-74 25	9.6	10.2	Go	2	..	20652b
19	3567	50.1	-28 25	10.0	10.8	Ko	1	..	24433b	69	178	50.4	+83 9	9.0	10.0	Ko	3	..	37546i
20	3775	50.1	-31 30	7.8	8.0	Ao	8	E	24433b	70	1021	50.4	+57 45	8.4	9.2	G5	1	..	37526i
21	2998	50.1	-38 49	9.4	9.5	F8	5	..	20534b	71	1022	50.4	+57 16	9.0	9.4	F5	2	..	37526i
22	1084	50.1	-55 50	8.0	9.5	K5	2	..	13007b	72	1457	50.4	+48 38	7.85	7.85	Ao	7	..	37438i
23	714	50.1	-59 35	8.5	9.3	G5	2	..	15176b	73	1367	50.4	+45 14	4.80	4.86	A2	..	2, R	56, 83
24	568	50.1	-68 24	9.3	10.3	K	1	..	15223b	74	1447	50.4	+17 53	6.86	7.86	Ko	5	..	37441i
25	96	50.2	+86 29	8.6	9.4	G5	3	..	37546i	75	1442	50.4	+9 0	7.4	7.9	F8	4	..	37652i
26	1019	50.2	+57 43	8.8	9.1	Fo	5	..	37526i	76	1509	50.4	+4 37	9.6	10.4	G5	2	R	37652i
27	1496	50.2	+34 48	8.82	8.82	A	2	..	37527i	77	1508	50.4	+4 36	9.3	10.1	G5	2	R	37652i
28	1502	50.2	+25 8	7.61	7.69	A3	4	..	38185i	78	1494	50.4	-0 42	9.3	9.3	B8	3	..	20867b
29	1632	50.2	+20 15	10.0	10.0	A	3	..	37441i	79	1820	50.4	-6 9	9.6	9.7	A2	3	..	20895b
30	1491	50.2	+14 1	8.8	8.8	Ao	3	..	36977i	80	1821	50.4	-6 57	8.9	8.9	Ao	7	..	20895b
31	1562	50.2	+8 27	6.14	6.14	Ao	10	..	37652i	81	1617	50.4	-8 22	8.1	8.1	B9	7	..	20895b
32	1453	50.2	-1 40	9.6	9.6	Ao	4	..	20867b	82	1729	50.4	-9 12	7.7	7.7	B8	8	..	20895b
33	1829	50.2	-2 21	7.7	8.7	Ko	6	..	20867b	83	1728	50.4	-10 1	8.91	9.05	A5	3	..	20895b
34	1817	50.2	-6 30	8.5	9.7	K5	2	..	20895b	84	1687	50.4	-11 38	9.0	9.0	B9	8	..	2434ob
35	1816	50.2	-6 41	9.2	9.8	Go	3	..	20895b	85	1688	50.4	-11 48	9.1	10.3	K5	2	..	2434ob
36	1628	50.2	-7 42	8.6	8.6	B9	4	..	20895b	86	1694	50.4	-12 39	9.1	9.9	G5	1	..	2434ob
37	1693	50.2	-12 24	9.1	9.4	Fo	4	R	2434ob	87	1605	50.4	-19 8	9.1	9.5	K	1	..	18975b
38	1673	50.2	-17 47	7.9	7.9	B8	3	..	8902b	88	3778	50.4	-25 55	10.9	9.9	Ko	1	..	20582b
39	1588	50.2	-22 55	9.2	8.6	B8	4	..	12631b	89	3575	50.4	-28 49	8.9	9.0	Fo	3	..	20582b
40	3773	50.2	-25 5	9.50	9.1	Ao	5	0,3	24433b	90	3654	50.4	-30 29	7.8	7.7	Ao	9	..	20582b
41	3385	50.2	-27 14	8.9	9.6	K5	2	..	20582b	91	3156	50.4	-37 50	10.7	9.8	Ao	2	..	20534b
42	3199	50.2	-35 43	8.7	9.0	Go	3	..	20534b	92	2654	50.4	-48 1	10.2	9.7	A2	4	..	38414b
43	2989	50.2	-44 49	8.8	9.4	Ko	4	..	38414b	93	2133	50.4	-51 39	9.4	9.6	Fo	4	..	38414b
44	2797	50.2	-45 19	9.6	9.1	A3	4	..	38414b	94	1186	50.4	-56 23	8.9	9.0	Go	7	..	13007b
45	2798	50.2	-45 55	9.8	9.4	G5	3	..	38414b	95	724	50.4	-62 29	9.2	9.6	F5	1	..	15176b
46	1558	50.3	+44 35	9.4	9.5	A5	3	..	5400m	96	662	50.4	-69 13	9.3	10.3	Ko	2	..	15223b
47	1624	50.3	+43 21	8.0	9.0	Ko	4	0,7	37501i	97	893	50.5	+62 51	9.7	10.1	F5	1	..	37545i
48	1625	50.3	+43 1	8.8	9.8	Ko	4	0,2	5400m	98	989	50.5	+57 57	9.2	9.7	F8	2	..	38239i
49	1556	50.3	+41 14	var.	var.	Nb	..	R	M	99	1626	50.5	+43 38	10.2	11.0	G5	2	..	5400m
50	1449	50.3	+31 31	8.4	9.0	Go	2	..	37527i	100	1433	50.5	+33 50	6.01	6.57	Go	7	..	37527i

THE HENRY DRAPER CATALOGUE.

51000

6^h 50^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1378	50.5	+15 24	7.7	8.9	K5	1	R	36977i	51	1478	50.7	+ 5 15	8.1	8.9	G5	3	..	37652i
2	1494	50.5	+14 38	8.2	8.6	F5	3	..	36977i	52	1757	50.7	-10 39	8.9	9.0	A2	5	..	20895b
3	1493	50.5	+14 4	9.3	9.4	A2	2	..	4413m	53	1693	50.7	-11 21	9.8	9.9	A2	3	..	24340b
4	1365	50.5	+11 4	8.7	9.0	F	1	..	36977i	54	1560	50.7	-15 34	7.5	8.6	K2	5	..	18975b
5	1475	50.5	+ 5 3	9.9	9.9	A	1	R	37652i	55	1624	50.7	-20 17	5.75	5.3	A2	..	0,7	28,199
6	1871	50.5	- 5 48	9.4	9.4	A0	3	..	20895b	56	1623	50.7	-20 33	9.4	9.2	B9	2	..	12631b
7	1689	50.5	-11 18	9.1	9.1	A0	6	..	24340b	57	4575	50.7	-23 29	10.9	9.2	B8	3	..	24433b
8	1691	50.5	-11 38	10.2	10.2	A0	3	..	24340b	58	3562	50.7	-26 25	10.9	10.1	A0	2	..	24433b
9	1726	50.5	-13 28	10.1	10.1	A0	2	..	24340b	59	3629	50.7	-29 21	9.3	11.0	Ma	2	..	24433b
10	1676	50.5	-17 41	9.6	9.6	B8	3	..	18975b	60	3632	50.7	-29 50	10.9	11.0	A	1	..	24433b
11	1645	50.5	-21 44	8.7	8.9	A2	3	..	12631b	61	3782	50.7	-31 11	8.9	9.8	K5	1	..	24433b
12	1590	50.5	-22 17	10.3	9.5	A2	1	..	12631b	62	2810	50.7	-42 59	9.0	9.5	Go	3	..	20556b
13	4578	50.5	-24 8	8.7	8.7	B8	6	..	24433b	63	2993	50.7	-44 7	8.6	9.4	Ko	2	..	20556b
14	3781	50.5	-31 41	6.83	6.6	A0	3	0,4	4659b	64	535	50.7	-72 36	9.4	10.2	G5	1	..	15168b
15	3219	50.5	-36 26	7.59	8.6	G5	7	..	20534b	65	232	50.7	-79 44	9.4	10.0	Go	5	..	20652b
16	2639	50.5	-41 49	8.7	9.8	G5	1	..	20556b	66	280	50.8	+75 33	7.27	8.05	G5	5	E	37343i
17	534	50.5	-72 21	8.7	9.5	G5	2	..	15168b	67	281	50.8	+75 23	6.85	7.41	Go	7	..	37559i
18	1170	50.6	+56 57	8.8	9.8	Ko	2	..	37526i	68	398	50.8	+69 47	6.74	7.52	G5	7	..	37559i
19	1206	50.6	+46 44	9.5	9.6	A2	3	..	5400m	69	462	50.8	+68 37	8.8	9.2	F5	4	..	38155i
20	..	50.6	+45 30	..	..	A	1	..	5400m	70	991	50.8	+58 29	9.4	9.8	F5	3	..	37526i
21	1620	50.6	+37 32	6.68	8.03	Mb	4	..	37527i	71	1276	50.8	+27 55	9.0	9.0	A0	1	E	38185i
22	1524	50.6	+35 24	9.4	10.4	K	1	..	37447i	72	1507	50.8	+24 57	8.81	8.87	A2	1	..	38185i
23	1447	50.6	+32 24	8.4	8.5	A5	3	..	37527i	73	1368	50.8	+11 9	8.1	8.9	G5	1	..	36977i
24	1354	50.6	+12 43	7.7	8.5	G5	4	..	36977i	74	1568	50.8	+ 8 52	7.09	8.16	K2	4	..	37652i
25	1456	50.6	- 1 24	9.6	9.6	B9	3	..	20867b	75	1458	50.8	- 1 7	9.6	9.6	A0	2	..	20867b
26	1620	50.6	- 8 31	8.5	9.6	K2	3	..	20895b	76	1648	50.8	- 3 55	9.4	9.4	B8	2	..	20895b
27	1730	50.6	- 9 31	8.5	8.5	B8	6	..	20895b	77	1731	50.8	- 4 55	8.90	9.97	K2	2	..	20895b
28	1756	50.6	-10 3	7.76	7.82	A2	8	..	20895b	78	1872	50.8	- 5 5	9.10	9.88	G5	1	..	20895b
29	1692	50.6	-11 49	10.2	10.2	A	2	..	24340b	79	1625	50.8	- 8 17	8.0	8.0	B8	7	..	20895b
30	1696	50.6	-12 52	9.2	10.0	G5	2	..	24340b	80	1732	50.8	- 9 3	8.5	8.8	F2	6	..	20895b
31	1653	50.6	-16 21	9.1	9.1	B8	3	..	18975b	81	1733	50.8	- 9 21	8.1	8.7	Go	4	..	20895b
32	1648	50.6	-22 3	9.4	9.2	A2	2	..	12631b	82	1758	50.8	-10 6	8.21	8.21	A0	7	..	20895b
33	1592	50.6	-22 39	9.1	9.0	F5	3	3,3	12631b	83	1698	50.8	-12 9	9.1	9.2	A2	4	..	24340b
34	4571	50.6	-23 27	10.4	9.8	K2	2	..	24433b	84	1729	50.8	-13 23	9.0	10.0	K	1	..	24340b
35	R	50.6	-24 3	9.1	9.1	B9	4	..	24433b	85	1679	50.8	-17 5	8.3	8.3	B9	2	..	8902b
36	4579	50.6	-24 12	8.9	8.4	B5	6	..	24433b	86	1594	50.8	-22 49	8.4	8.4	A2	6	2,7	24433b
37	4582	50.6	-24 28	10.7	9.7	Fo	3	..	24433b	87	4588	50.8	-24 7	10.0	9.6	F2	3	..	24433b
38	4580	50.6	-24 49	7.9	8.7	B5	4	..	20582b	88	4586	50.8	-24 36	8.3	7.9	B8	7	..	20582b
39	3561	50.6	-26 39	11.4	10.4	A0	1	..	24433b	89	3785	50.8	-25 40	10.7	10.2	Ko	1	..	24433b
40	3393	50.6	-27 26	8.3	8.7	Ko	5	..	20582b	90	3787	50.8	-25 44	9.7	10.5	Ko	1	..	24433b
41	3659	50.6	-30 12	10.2	9.9	A0	3	..	24433b	91	3563	50.8	-26 57	10.4	10.1	Fo	2	..	24433b
42	3182	50.6	-34 6	7.08	7.2	A0	8	0,3	20534b	92	3664	50.8	-30 28	10.2	11.0	A2	2	..	24433b
43	1177	50.6	-53 58	6.50	7.7	Ko	8	..	13007b	93	2923	50.8	-39 28	9.0	8.7	A0	6	..	20534b
44	416	50.6	-74 32	9.6	10.0	F5	4	..	20652b	94	2448	50.8	-51 1	9.2	9.0	A2	7	..	38414b
45	131	50.6	-83 54	10.1	11.1	K	1	..	20557b	95	1260	50.9	+51 29	8.0	8.0	A0	4	E	37419i
46	1150	50.7	+52 0	7.7	8.3	Go	4	E	37419i	96	1207	50.9	+45 59	10.2	11.2	K	1	..	5400m
47	1557	50.7	+40 58	7.75	8.75	Ko	4	..	37501i	97	1627	50.9	+43 35	10.2	10.5	Fo	2	..	5400m
48	1368	50.7	+30 10	8.4	9.4	Ko	2	..	37527i	98	1558	50.9	+41 51	6.87	7.87	Ko	7	0,4	37501i
49	1467	50.7	+24 25	8.8	9.8	Ko	1	..	38185i	99	1525	50.9	+35 41	9.8	10.6	G5	2	..	37447i
50	1382	50.7	+15 50	9.3	9.4	A3	3	..	4413m	100	1369	50.9	+30 44	8.1	9.1	Ko	2	5,1	37527i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

51100

6^h 50^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1470	50.9	+24 47	6.96	7.74	G5	5	..	38185i	51	1650	51.1	- 3 4	8.6	8.6	Ao	5	..	20895b
2	1437	50.9	+21 6	7.8	7.8	B8	8	..	37441i	52	1873	51.1	- 5 39	9.1	9.1	Ao	4	..	20895b
3	1357	50.9	+12 31	8.7	9.0	F2	3	..	36977i	53	1697	51.1	-11 43	9.4	9.7	Fo	4	..	24340b
4	1335	50.9	+10 5	5.88	5.83	B8	..	1,9	56,83	54	1695	51.1	-11 44	9.4	9.7	F	3	..	24340b
5	1468	50.9	+ 2 27	7.9	8.7	G5	4	..	37652i	55	4585	51.1	-23 24	10.4	8.9	B8	4	1,2	24433b
6	1459	50.9	- 1 27	7.6	7.7	A2	7	..	37700i	56	3401	51.1	-27 59	10.7	10.1	Ko	2	..	24433b
7	1626	50.9	- 8 49	8.9	10.3	Ma	..	..	M	57	3589	51.1	-28 40	10.0	10.1	B9	3	..	24433b
8	1731	50.9	-13 51	10.5	10.5	A	1	..	24340b	58	3587	51.1	-28 44	10.2	10.4	G5	1	..	24433b
9	1655	50.9	-16 31	8.5	8.6	A2	7	..	18975b	59	2767	51.1	-40 4	9.10	9.2	G5	3	..	20534b
10	1650	50.9	-21 45	8.7	8.6	B9	4	..	12631b	60	641	51.1	-63 54	9.1	9.5	F5	1	..	15176b
11	4595	50.9	-24 3	10.9	9.9	B9	2	..	24433b	61	409	51.1	-73 11	8.1	8.5	F5	8	..	20652b
12	4593	50.9	-24 18	10.2	9.7	F2	2	..	24433b	62	410	51.1	-73 59	9.7	10.2	F8	3	..	20652b
13	4594	50.9	-24 24	10.4	9.9	Go	2	..	24433b	63	408	51.1	-75 35	9.6	10.2	Go	2	..	20652b
14	3396	50.9	-27 7	9.5	9.6	F5	2	..	20582b	64	409	51.1	-75 55	10.8	10.8	A	1	..	20652b
15	3400	50.9	-27 20	10.7	9.7	A2	1	..	20582b	65	1208	51.2	+46 38	10.2	10.3	A2	1	..	5400m
16	3581	50.9	-28 15	7.7	8.5	F5	5	..	20582b	66	1453	51.2	+31 21	8.6	9.7	K2	1	..	37527i
17	3221	50.9	-36 31	9.6	9.9	G5	1	..	20534b	67	1373	51.2	+30 54	8.6	9.8	K5	..	..	M
18	2925	50.9	-39 11	8.7	8.7	A2	5	..	20534b	68	1546	51.2	+19 36	8.1	8.4	Fo	3	..	37441i
19	2647	50.9	-41 48	8.8	9.5	G5	2	..	20556b	69	1482	51.2	+13 48	8.7	8.7	Ao	3	..	36977i
20	2139	50.9	-51 46	8.4	8.8	Ko	4	..	38414b	70	1513	51.2	+ 4 5	8.9	9.7	G5	2	..	37652i
21	1028	50.9	-52 4	9.0	9.7	Ko	4	..	38414b	71	1468	51.2	+ 3 44	8.3	8.2	B5	4	..	37652i
22	1029	50.9	-52 17	9.0	9.6	Ko	3	..	38414b	72	1469	51.2	+ 3 20	8.4	8.4	B9	2	..	37700i
23	154	50.9	-82 57	9.8	10.1	Fo	2	..	20557b	73	1713	51.2	+ 0 55	8.69	8.69	Ao	3	..	20867b
24	1560	51.0	+44 33	9.2	9.2	Ao	5	0,3	5400m	74	1761	51.2	-10 28	9.2	9.2	Ao	4	..	20895b
25	1628	51.0	+42 21	9.2	9.5	Fo	2	..	37501i	75	1658	51.2	-16 24	8.9	9.7	G5	2	..	18975b
26	1510	51.0	+25 43	9.0	9.0	Ao	2	..	38185i	76	4598	51.2	-24 14	10.2	9.0	B8	5	..	24433b
27	1509	51.0	+25 5	7.59	7.59	Ao	5	..	38185i	77	3160	51.2	-37 11	9.0	9.2	F2	3	..	20534b
28	1496	51.0	+14 10	8.5	8.6	A3	2	..	36977i	78	2926	51.2	-39 8	10.4	10.7	K5	1	..	20534b
29	1699	51.0	-12 5	10.1	10.4	F	1	..	24340b	79	2927	51.2	-39 38	9.4	8.9	A3	6	..	20534b
30	1682	51.0	-17 29	9.8	9.8	Ao	2	..	18975b	80	2807	51.2	-45 18	9.6	9.4	F5	3	..	38414b
31	1680	51.0	-17 55	10.1	10.1	A	1	..	18975b	81	2486	51.2	-49 26	10.0	10.5	Go	2	..	38414b
32	3636	51.0	-29 45	9.5	9.8	Go	4	..	24433b	82	2487	51.2	-49 36	8.5	10.5	K2	2	..	38414b
33	3670	51.0	-31 1	8.01	8.3	F5	7	..	24433b	83	2485	51.2	-49 55	10.0	10.8	Ko	2	..	38414b
34	3792	51.0	-31 22	10.2	8.9	F5	2	..	24433b	84	233	51.3	+81 44	9.4	10.5	K2	1	..	38330i
35	3791	51.0	-31 34	8.7	9.8	Ma	2	..	24433b	85	1261	51.3	+50 58	7.9	9.0	K2	3	E	37419i
36	3476	51.0	-32 40	7.81	8.9	K5	4	..	18926b	86	1523	51.3	+21 59	9.0	9.1	A2	2	..	38185i
37	3006	51.0	-38 21	10.2	10.4	G5	1	..	20534b	87	1644	51.3	+20 38	9.1	9.1	Ao	3	..	37441i
38	2745	51.0	-46 18	7.9	8.3	A2	8	..	38414b	88	1370	51.3	+11 32	7.7	7.7	B9	5	..	36977i
39	1072	51.0	-57 52	9.8	9.8	Ao	2	..	13007b	89	1370a	51.3	+11 22	var.	var.	Md	..	R	M
40	570	51.0	-68 35	10.0	11.0	K	1	..	15223b	90	1599	51.3	+ 1 51	9.6	9.7	A2	2	..	20867b
41	105	51.1	+85 54	8.2	8.7	F8	4	..	37546i	91	1502	51.3	- 0 44	8.9	8.9	Ao	4	0,3	20867b
42	1550	51.1	+23 29	9.0	9.1	A2	4	..	38185i	92	1501	51.3	- 0 52	8.3	9.5	K5	3	..	20867b
43	1640	51.1	+20 41	9.8	10.6	G5	1	..	37441i	93	1651	51.3	- 3 40	8.7	8.5	B3	5	..	20895b
44	1369	51.1	+11 53	8.3	8.6	F2	2	..	36977i	94	1831	51.3	- 6 59	8.9	8.9	B8	6	..	20895b
45	1446	51.1	+ 6 47	8.9	8.9	A	2	..	37652i	95	1627	51.3	- 8 14	9.2	9.2	Ao	3	..	20895b
46	1443	51.1	+ 6 9	8.3	8.3	B8	5	..	37652i	96	1699	51.3	-11 24	9.4	9.4	B9	5	..	24340b
47	1466	51.1	+ 3 16	8.3	8.3	Ao	3	..	37700i	97	1735	51.3	-13 37	8.5	9.3	G5	6	..	24340b
48	1500	51.1	- 0 51	8.9	9.2	Fo	2	..	20867b	98	1645	51.3	-14 4	9.6	9.7	A2	2	..	24340b
49	1836	51.1	- 2 17	10.1	10.2	A2	2	..	20867b	99	1610	51.3	-20 1	4.62	5.04	F5	..	5,8R	28,199
50	1835	51.1	- 3 3	8.6	8.6	B8	6	..	20895b	100	1655	51.3	-21 54	6.81	6.6	B5	6	0,8	8902b

THE HENRY DRAPER CATALOGUE.

51200

6^h 51^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3794	51.3	-25 58	10.9	10.2	Ao	2	..	24433b	51	R	51.5	-13 55	5.19	5.97	A2	7	R	8909b
2	3591	51.3	-28 55	6.96	7.9	F5	8	..	20582b	52	1656	51.5	-21 35	9.8	9.5	A3	1	..	12631b
3	3642	51.3	-29 56	10.4	11.0	A2	2	..	24433b	53	1601	51.5	-22 15	9.2	9.3	A5	2	..	12631b
4	3796	51.3	-31 15	9.0	8.9	F2	4	..	24433b	54	3798	51.5	-25 4	9.7	9.7	Ao	4	..	24433b
5	3192	51.3	-34 5	9.0	8.9	F5	3	..	20534b	55	3582	51.5	-27 1	8.1	8.1	B3	8	..	20582b
6	3161	51.3	-37 15	8.5	10.1	K5	1	..	20534b	56	3593	51.5	-28 32	8.1	8.7	F5	5	..	20582b
7	2776	51.3	-40 20	9.4	9.6	Ko	3	..	20534b	57	3677	51.5	-30 32	9.5	10.1	Ko	1	..	24433b
8	2818	51.3	-42 14	6.00	8.6	Na	..	0,4	56,123	58	3233	51.5	-36 12	7.6	9.2	Ma	3	..	20534b
9	2998	51.3	-44 15	8.9	9.4	Ko	2	..	20556b	59	3162	51.5	-37 49	8.4	8.3	Fo	6	..	20534b
10	716	51.3	-59 13	6.38	6.7	A2	4	2,10	42927b	60	2934	51.5	-40 2	9.40	9.9	Ko	2	..	20534b
11	665	51.3	-69 52	6.68	7.8	Go	8	..	15168b	61	2780	51.5	-40 10	10.9	9.9	Ao	2	..	20534b
12	359	51.4	+72 58	8.4	9.2	G5	3	..	37559i	62	2781	51.5	-40 43	8.4	9.6	K2	4	..	20534b
13	..	51.4	+46 31	..	..	G	1	..	5400m	63	2665	51.5	-47 52	9.8	9.7	F5	3	..	38414b
14	1628	51.4	+43 20	8.7	9.7	Ko	2	..	5400m	64	2588	51.5	-48 6	9.8	10.5	Ko	2	..	38414b
15	1437	51.4	+33 19	9.5	9.6	A5	2	..	37447i	65	2457	51.5	-50 8	10.0	9.9	Fo	2	..	38414b
16	1438	51.4	+33 0	9.4	9.8	F5	2	..	37447i	66	2458	51.5	-50 30	6.13	7.3	Ko	10	..	38414b
17	1499	51.4	+14 51	9.04	10.04	Ko	4	..	4413m	67	2149	51.5	-51 54	8.6	9.6	K2	3	..	38414b
18	1601	51.4	+1 39	9.3	9.3	A	1	..	20867b	68	1142	51.5	-54 46	7.6	8.9	Ko	4	..	13007b
19	1600	51.4	+1 19	7.7	8.5	G5	5	..	37652i	69	663	51.5	-65 30	8.3	8.3	B8	6	..	15223b
20	1717	51.4	+0 15	7.7	8.7	Ko	4	..	37700i	70	571	51.5	-68 36	9.0	9.1	A3	4	..	15223b
21	1840	51.4	-2 3	9.1	10.1	Ko	3	..	20867b	71	1147	51.6	+55 33	9.5	10.1	G	2	..	37526i
22	1740	51.4	-4 15	9.2	9.2	Ao	2	..	20895b	72	1654	51.6	+38 7	8.0	9.0	Ko	1	..	38408i
23	1629	51.4	-8 28	8.9	8.9	B8	4	..	20895b	73	1625	51.6	+37 1	8.5	9.1	Go	3	..	37527i
24	1564	51.4	-15 37	9.1	10.2	K2	1	..	18975b	74	1501	51.6	+34 27	9.1	9.5	F5	3	..	37527i
25	1565	51.4	-16 0	9.1	10.1	Ko	1	..	18975b	75	1280	51.6	+27 0	9.4	9.9	F8	2	..	38185i
26	1659	51.4	-16 36	9.4	9.4	Ao	2	..	18975b	76	1500	51.6	+14 16	9.9	10.0	A2	3	..	4413m
27	1606	51.4	-18 19	8.4	8.7	Fo	6	..	18975b	77	1719	51.6	+0 56	7.54	8.72	K5	1	..	37652i
28	1600	51.4	-22 3	8.7	9.0	K2	3	..	12631b	78	1718	51.6	+0 33	8.5	9.6	K2	3	..	20867b
29	4601	51.4	-24 16	9.3	9.3	Ko	5	..	24433b	79	1653	51.6	-3 39	8.5	9.7	K5	3	..	20895b
30	3797	51.4	-25 58	10.9	10.1	A5	2	..	24433b	80	1631	51.6	-8 36	10.2	10.2	A	1	..	20895b
31	3232	51.4	-36 44	9.4	10.7	K	1	..	20534b	81	1567	51.6	-15 18	9.0	9.4	F5	4	..	18975b
32	2819	51.4	-42 59	8.5	9.2	K5	3	..	20556b	82	1611	51.6	-19 38	7.9	9.0	K5	3	..	12631b
33	2811	51.4	-45 32	9.2	10.0	Ko	2	..	38414b	83	1602	51.6	-22 49	5.26	5.09	B3	..	0,7-	28,199
34	2752	51.4	-46 43	10.5	10.3	F8	2	..	38414b	84	4597	51.6	-23 51	10.4	9.7	Ao	2	..	24433b
35	2663	51.4	-47 35	10.0	10.0	G5	2	..	38414b	85	4604	51.6	-24 34	8.5	8.1	B3	7	..	20582b
36	2488	51.4	-49 4	10.2	10.5	F8	1	..	38414b	86	3801	51.6	-25 4	9.5	9.6	B9	4	..	24433b
37	2147	51.4	-51 18	8.6	8.5	Ao	8	..	38414b	87	3585	51.6	-26 29	9.5	10.4	K5	1	..	24433b
38	1141	51.4	-54 20	8.3	8.3	Ao	6	..	13007b	88	3596	51.6	-28 57	11.2	10.1	Ao	2	..	24433b
39	1192	51.4	-56 15	9.7	10.3	G	1	..	13007b	89	3163	51.6	-37 22	8.1	8.0	B8	8	..	20534b
40	676	51.5	+63 39	9.7	10.1	F5	2	..	37545i	90	3013	51.6	-38 54	9.8	10.4	Ko	1	..	20534b
41	1548	51.5	+19 38	8.2	9.3	K2	1	..	37441i	91	2820	51.6	-42 37	8.8	9.2	Kb	3	..	20556b
42	1453	51.5	+16 59	9.9	10.7	G5	3	..	4413m	92	2666	51.6	-47 2	10.9	10.3	F8	2	..	38414b
43	1387	51.5	+14 58	9.3	9.8	F8	3	..	4413m	93	1457	51.7	+31 35	8.6	9.2	Go	2	..	37527i
44	1488	51.5	+12 59	9.3	10.4	K2	2	E	4413m	94	1404	51.7	+26 41	9.0	10.1	K2	1	..	38185i
45	1473	51.5	+2 20	8.4	8.4	B9	4	..	37652i	95	1554	51.7	+23 2	7.51	8.07	Go	3	..	37441i
46	1602	51.5	+1 37	8.9	8.9	A	2	..	20867b	96	1552	51.7	+19 52	7.30	7.44	A5	6	..	37441i
47	1603	51.5	+1 5	8.69	9.76	K2	2	..	20867b	97	1338	51.7	+16 10	9.3	10.3	Ko	2	..	4413m
48	1503	51.5	-0 17	8.7	8.8	A2	3	..	20867b	98	1388	51.7	+15 19	9.3	9.7	F5	4	..	4413m
49	1735	51.5	-9 47	9.1	9.1	Ao	2	..	20895b	99	1489	51.7	+13 56	9.3	10.5	K5	1	..	4413m
50	1741	51.5	-13 55	5.19	5.97	G5	7	R	8909b	100	1376	51.7	+11 17	9.3	9.9	Go	2	..	36977i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

51300

6^h 51^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1474	51.7	+ 2 23	8.9	9.0	A5	2	..	37652i	51	1799	51.9	+39 40	7.52	7.52	Ao	3	..	38408i
2	1604	51.7	+ 1 26	8.9	8.9	B8	3	..	37652i	52	1450	51.9	+32 43	9.4	9.8	F5	1	..	37447i
3	1505	51.7	- 0 47	8.9	8.9	Ao	3	..	20867b	53	1651	51.9	+20 37	7.8	7.8	B9	8	..	37441i
4	1655	51.7	- 3 31	8.5	8.8	Fo	4	..	20895b	54	1423	51.9	+18 2	7.13	6.94	B2	7	..	37441i
5	1636	51.7	- 8 3	9.1	9.2	A2	3	..	20895b	55	1503	51.9	+14 48	9.31	9.73	F5	2	..	4413m
6	1702	51.7	-11 37	10.2	10.3	A5	2	..	24340b	56	1377	51.9	+11 7	7.7	8.2	F8	3	..	36977i
7	1703	51.7	-12 43	9.1	9.1	B9	5	..	24340b	57	1724	51.9	+ 0 42	8.5	8.5	Ao	2	..	37652i
8	1648	51.7	-14 57	9.26	9.26	Ao	2	..	18975b	58	1658	51.9	- 3 21	9.4	9.4	B9	4	..	20895b
9	1661	51.7	-16 55	4.39	4.27	B5	..	3, R	56,83	59	1881	51.9	- 5 20	8.5	8.6	A5	8	..	20895b
10	4602	51.7	-23 54	10.7	9.7	A2	2	..	24433b	60	1640	51.9	- 8 3	7.4	7.4	Ao	3	2,7	38609i
11	3599	51.7	-28 15	10.4	10.1	Ao	2	..	24433b	61	1705	51.9	-12 56	9.8	9.8	B9	1	..	24340b
12	3014	51.7	-38 26	7.43	8.4	Ko	7	..	20534b	62	1568	51.9	-15 3	9.8	9.8	A	1	..	18975b
13	2937	51.7	-39 49	10.4	9.8	A5	3	..	20534b	63	1628	51.9	-20 15	9.4	9.0	Ao	3	..	12631b
14	2783	51.7	-41 2	8.7	9.9	Mb	..	..	M	64	3806	51.9	-25 44	10.4	10.2	F8	2	..	24433b
15	2785	51.7	-43 52	7.5	8.5	Ko	4	..	20556b	65	3607	51.9	-28 25	10.0	9.7	F8	2	..	24433b
16	2813	51.7	-45 26	10.2	9.8	B9	2	..	38414b	66	3654	51.9	-29 49	9.7	9.8	A3	2	..	20582b
17	2814	51.7	-45 46	8.2	8.8	Fo	6	..	38414b	67	3349	51.9	-33 41	7.14	8.4	K2	6	..	18926b
18	2753	51.7	-46 21	9.8	10.3	K2	2	..	38414b	68	2784	51.9	-40 56	9.1	9.8	G5	1	..	20556b
19	2590	51.7	-48 55	10.2	10.2	A2	2	..	38414b	69	664	51.9	-65 8	9.24	9.3	Fo	3	..	15223b
20	422	51.7	-76 44	6.90	9.1	G5	10	..	20652b	70	378	52.0	+71 54	7.7	8.2	F8	7	..	37559i
21	225	51.8	+79 35	9.5	9.5	A	1	..	38330i	71	1172	52.0	+56 21	9.4	10.0	G	1	..	37526i
22	399	51.8	+69 37	8.2	9.3	K2	2	..	37559i	72	1340	52.0	+16 12	10.3	10.3	A	1	..	4413m
23	1171	51.8	+56 15	8.0	9.1	K2	1	..	38239i	73	1504	52.0	+14 44	9.9	9.9	Ao	3	..	4413m
24	1152	51.8	+52 41	6.74	7.74	Ko	7	E	37419i	74	..	52.0	+14 32	..	..	A	1	..	4413m
25	1281	51.8	+27 9	8.4	9.2	G5	2	..	38185i	75	1505	52.0	+13 58	9.1	9.2	A3	4	..	4413m
26	1477	51.8	+24 56	9.01	9.35	F2	1	..	38185i	76	1470	52.0	- 1 53	9.12	9.18	A2	3	..	20867b
27	1339	51.8	+16 19	9.9	10.9	K	1	..	4413m	77	1882	52.0	- 5 13	8.15	9.15	Ko	5	..	20895b
28	1501	51.8	+14 21	10.3	11.3	Ko	1	..	4413m	78	1633	52.0	- 8 40	8.6	8.9	F2	6	..	20895b
29	..	51.8	+14 1	..	..	A	1	..	4413m	79	1635	52.0	- 8 53	8.9	8.9	B8	6	..	20895b
30	1361	51.8	+12 2	6.16	6.44	Fo	8	..	36977i	80	1693	52.0	-17 26	9.2	9.2	Ao	3	..	18975b
31	1486	51.8	+ 5 15	8.9	8.9	B8	3	..	37652i	81	1629	52.0	-20 32	10.1	9.3	A5	2	..	12631b
32	1657	51.8	- 3 33	7.4	7.7	Fo	7	..	20895b	82	1659	52.0	-21 34	9.6	9.2	A2	2	..	12631b
33	1878	51.8	- 5 29	9.1	9.1	B8	7	..	20895b	83	1604	52.0	-22 21	9.8	9.2	F8	2	..	12631b
34	1836	51.8	- 6 13	9.1	9.2	A3	4	..	20895b	84	4607	52.0	-23 52	11.2	9.8	A	1	..	24433b
35	1632	51.8	- 8 12	6.88	7.16	A3	9	0,3 R	20895b	85	3596	52.0	-26 30	10.9	10.2	A5	2	..	24433b
36	1703	51.8	-11 24	10.5	10.5	A	1	..	24340b	86	3419	52.0	-27 29	11.2	9.9	B8	1	..	20582b
37	1689	51.8	-17 4	8.7	9.1	F5	3	..	18975b	87	3611	52.0	-28 12	9.2	9.6	F5	3	..	20582b
38	1608	51.8	-18 58	9.1	9.9	G5	1	..	18975b	88	3658	52.0	-29 59	9.05	9.5	Ko	2	..	20582b
39	1614	51.8	-19 55	8.96	9.0	A2	3	..	12631b	89	3692	52.0	-30 12	10.2	9.8	A2	3	..	24433b
40	1658	51.8	-21 22	9.1	8.6	B5	4	..	12631b	90	2944	52.0	-39 16	10.4	9.9	G5	2	..	20534b
41	1603	51.8	-22 53	9.0	8.9	Ko	4	0,3	24433b	91	2659	52.0	-41 37	9.6	9.8	Ko	1	..	20671b
42	4613	51.8	-24 3	11.8	10.2	Ao	2	..	24433b	92	2791	52.0	-43 29	9.4	9.4	Ao	2	..	20556b
43	3804	51.8	-25 23	7.29	7.7	Fo	8	..	20582b	93	2591	52.0	-48 34	10.0	9.9	Fo	3	..	38414b
44	3592	51.8	-27 0	8.5	8.1	B9	7	..	20582b	94	2499	52.0	-49 15	9.6	9.9	F5	3	..	38414b
45	3416	51.8	-27 55	10.2	9.9	F8	2	..	24433b	95	1194	52.0	-56 18	8.8	10.6	K	1	R	13007b
46	3604	51.8	-28 29	9.2	9.6	G5	1	..	20582b	96	360	52.1	+73 34	7.50	8.28	G5	5	..	37559i
47	3651	51.8	-29 33	10.2	9.8	A2	1	..	20582b	97	1460	52.1	+48 45	7.45	8.45	Ko	5	..	37438i
48	226	51.9	+79 24	8.8	10.2	Ma	1	..	38330i	98	1517	52.1	+25 7	8.46	9.46	Ko	1	..	38185i
49	400	51.9	+69 21	7.50	8.68	K5	2	..	37559i	99	1447	52.1	+21 24	8.6	9.7	K2	1	..	38238i
50	1150	51.9	+55 53	8.69	8.69	Ao	4	2,2	37526i	100	1341	52.1	+16 43	8.4	9.2	G5	7	0,1	4413m

THE HENRY DRAPER CATALOGUE.

51400

6^h 52^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1454	52.1	+ 5 58	9.6	9.6	A	1	..	37652i	51	1472	52.3	- 1 9	8.9	9.0	A3	4	..	20867b
2	1507	52.1	- 0 6	8.83	8.89	A2	2	..	37700i	52	1745	52.3	- 4 4	8.5	8.3	B3	5	..	20895b
3	1838	52.1	- 6 3	9.2	9.2	B8	4	..	20895b	53	1744	52.3	- 4 14	9.1	9.2	A2	3	..	20895b
4	1840	52.1	- 6 5	9.4	9.4	B9	2	..	20895b	54	1772	52.3	-10 49	9.1	9.1	A0	2	..	24340b
5	1666	52.1	-16 22	8.5	9.5	K0	2	..	18975b	55	1611	52.3	-18 29	9.2	10.0	G5	1	..	18975b
6	1610	52.1	-18 31	9.1	10.2	K2	1	..	18975b	56	1608	52.3	-22 23	9.1	8.9	Go	2	..	12631b
7	4615	52.1	-23 51	11.2	9.7	G5	1	..	24433b	57	1609	52.3	-22 31	7.9	8.6	K0	5	..	12631b
8	4620	52.1	-24 41	8.5	9.4	K0	2	..	20582b	58	3811	52.3	-25 8	9.5	10.1	F8	3	..	24433b
9	3808	52.1	-25 26	9.7	9.9	A0	4	..	24433b	59	3617	52.3	-28 31	9.5	9.6	B9	1	..	20582b
10	3600	52.1	-26 43	8.5	9.9	K5	2	..	24433b	60	3703	52.3	-30 28	10.4	9.8	A2	2	..	24433b
11	3808	52.1	-31 40	6.42	6.2	B8	6	1,4	7406b	61	2946	52.3	-39 21	8.7	8.7	A3	6	..	20534b
12	3236	52.1	-36 51	9.4	9.8	Go	1	..	20534b	62	2787	52.3	-40 3	8.67	8.7	A3	5	..	20534b
13	3166	52.1	-37 2	10.9	10.7	K0	1	..	20534b	63	3007	52.3	-44 6	9.4	9.4	K0	1	..	20556b
14	1093	52.1	-55 39	8.7	9.5	A3	3	..	13007b	64	2817	52.3	-45 29	9.0	9.4	K0	2	..	38414b
15	731	52.1	-61 32	8.3	8.5	F0	4	..	18486b	65	2501	52.3	-49 28	10.5	10.5	Go	2	..	38414b
16	553	52.2	+65 54	7.62	7.62	A0	7	..	37545i	66	618	52.3	-66 42	9.3	9.9	Go	2	..	15223b
17	1038	52.2	+59 37	9.0	9.1	A3	3	..	37526i	67	1023	52.4	+60 33	8.7	8.8	A3	4	..	37526i
18	1629	52.2	+42 26	6.61	6.61	A0	9	..	37501i	68	1039	52.4	+59 12	10.2	10.2	A	1	..	37526i
19	1531	52.2	+22 37	6.88	7.66	G5	6	..	37441i	69	1562	52.4	+44 40	8.6	8.6	A0	4	..	37501i
20	1448	52.2	+21 14	8.8	8.8	A0	2	..	37441i	70	1539	52.4	+36 56	8.8	9.6	G5	2	..	37447i
21	1342	52.2	+16 47	8.7	8.8	A2	7	0,1	4413m	71	1519	52.4	+25 4	8.11	8.53	F5	3	..	38185i
22	1844	52.2	- 2 21	9.2	9.3	A2	4	..	20867b	72	1508	52.4	+14 32	9.6	9.6	A	3	..	4413b
23	1841	52.2	- 6 19	10.2	10.3	A2	2	..	20895b	73	1473	52.4	- 1 14	8.7	8.7	A0	3	..	37700i
24	1642	52.2	- 8 3	6.44	6.86	F5	5	0, R	38609i	74	1886	52.4	- 5 55	9.1	10.3	K5	2	..	20895b
25	1771	52.2	- 8 3	8.5	8.5	B9	7	..	24340b	75	1885	52.4	- 5 57	9.2	10.4	K5	2	..	20895b
26	1705	52.2	-11 15	9.1	9.2	A2	6	..	24340b	76	1843	52.4	- 6 23	9.6	9.6	B9	2	..	20895b
27	1704	52.2	-12 0	10.1	10.1	A	1	..	24340b	77	1639	52.4	- 8 24	8.3	8.1	B3	8	5,2	20895b
28	1570	52.2	-15 15	9.1	10.1	K0	1	..	46170b	78	1641	52.4	- 8 56	var.	var.	Md	4	0,4 R	20895b
29	3810	52.2	-25 55	10.4	10.4	G5	1	..	24433b	79	1773	52.4	-10 8	8.26	8.21	B8	7	..	20895b
30	3604	52.2	-26 32	10.0	9.6	Go	4	..	24433b	80	1774	52.4	-10 41	6.97	6.85	B5p	9	R	24340b
31	3701	52.2	-30 39	8.7	9.2	F0	4	..	24433b	81	1669	52.4	-16 56	9.0	9.0	B9	6	..	18975b
32	3491	52.2	-32 56	8.0	8.0	A3	7	..	18926b	82	3433	52.4	-27 55	10.0	9.4	B9	3	..	20582b
33	3021	52.2	-38 32	7.57	7.9	F5	7	..	20534b	83	3664	52.4	-29 6	10.7	10.1	F5	2	..	24433b
34	2796	52.2	-43 8	9.4	9.8	K0	2	..	20671b	84	3665	52.4	-29 27	8.3	9.5	K5	3	..	20582b
35	2154	52.2	-51 34	9.1	8.8	B9	7	..	38414b	85	3210	52.4	-34 36	8.0	8.3	F0	5	..	20534b
36	1031	52.2	-52 7	8.5	9.6	K2	3	..	38414b	86	3209	52.4	-34 50	8.45	8.3	A0	6	..	20534b
37	616	52.2	-66 15	9.6	9.9	F	1	..	15223b	87	3022	52.4	-38 9	9.0	9.0	F0	5	..	20534b
38	1097	52.3	+54 35	8.6	8.7	A3	3	..	37526i	88	3011	52.4	-44 13	9.6	9.4	A0	2	..	20556b
39	1656	52.3	+38 12	6.15	7.22	K2	5	..	38408i	89	3012	52.4	-44 48	8.6	9.4	K0	1	..	20556b
40	1538	52.3	+36 2	10.7	10.8	A5	2	E	37447i	90	2761	52.4	-46 21	9.8	9.8	F8	3	..	38414b
41	1379	52.3	+30 27	9.5	9.5	A	2	..	37527i	91	717	52.4	-59 56	9.12	9.6	F0	2	..	15176b
42	1343	52.3	+16 52	8.7	9.7	K0	5	..	4413m	92	668	52.4	-69 18	8.8	10.0	K5	2	..	15223b
43	1506	52.3	+14 38	9.6	10.2	Go	2	..	4413m	93	669	52.4	-69 30	8.7	9.7	K0	2	..	15223b
44	1507	52.3	+14 38	9.6	10.2	Go	1	..	4413m	94	419	52.4	-74 26	9.0	10.0	K0	4	..	20652b
45	1379	52.3	+11 22	8.5	9.5	K	1	..	36977b	95	678	52.5	+63 49	6.71	7.89	K5	5	..	37545i
46	1456	52.3	+ 9 44	8.5	8.5	A	1	E	36977b	96	1025	52.5	+56 59	9.4	9.8	F5	2	..	37526i
47	1489	52.3	+ 5 45	9.6	9.6	A	1	..	37652i	97	1372	52.5	+45 7	8.9	9.7	G5	1	..	37501i
48	1477	52.3	+ 3 1	7.8	7.9	A5	6	..	37652i	98	1530	52.5	+35 50	10.0	10.1	A2	2	..	37447i
49	1728	52.3	+ 0 0	8.63	8.69	A2	3	..	37700i	99	..	52.5	+16 29	..	..	A0	2	..	4413m
50	..	..	..	..	..	..	..	..	..	100	1344	52.5	+16 1	8.9	9.2	F	5	..	4413m

ANNALS OF HARVARD COLLEGE OBSERVATORY.

51500

6^h 52^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1511	52.5	+14 49	9.57	10.13	Go	3	..	4413m	51	3623	52.6	-28 47	9.5	10.1	Go	2	..	24433b
2	1509	52.5	+14 22	7.6	7.6	B ₉	6	0,7	36977b	52	3813	52.6	-31 7	8.3	9.5	K ₂	3	..	24433b
3	1510	52.5	+14 5	10.3	10.4	A ₂	2	..	4413m	53	2668	52.6	-41 12	8.0	9.5	K ₀	2	..	20556b
4	1492	52.5	+13 8	10.3	11.3	K ₀	1	..	4413m	54	2819	52.6	-45 59	9.8	10.6	K ₂	1	..	38414b
5	1586	52.5	+8 18	8.5	8.5	B ₉	3	..	37652i	55	718	52.6	-59 45	8.3	7.7	B ₉	6	..	15176b
6	1459	52.5	+6 41	7.7	7.6	B ₅	5	..	37652i	56	644	52.6	-63 55	9.1	10.1	K ₀	1	..	15176b
7	1610	52.5	+1 38	7.9	7.7	B ₃	5	..	37652i	57	572	52.6	-70 50	5.52	5.47	B ₈	..	3,8 R	56,123
8	1847	52.5	-2 48	9.4	9.7	F ₀	2	..	20867b	58	258	52.7	+76 19	8.0	9.0	K ₀	4	0,3	37559i
9	1664	52.5	-3 34	8.7	8.7	A ₀	6	..	20895b	59	1627	52.7	+37 18	9.5	9.5	B ₉	3	..	36522i
10	1746	52.5	-4 57	9.6	10.0	F ₅	1	..	20895b	60	1628	52.7	+37 14	7.30	7.06	B	5	R	36522i
11	1888	52.5	-5 17	8.7	8.7	B ₈	8	..	20895b	61	1531	52.7	+35 13	9.0	9.1	A ₅	3	..	37447i
12	1656	52.5	-14 17	9.4	9.5	A ₂	3	..	18975b	62	1459	52.7	+17 2	9.6	10.7	K ₂	2	..	4413m
13	1618	52.5	-19 50	9.4	8.6	B ₉	3	..	12631b	63	1497	52.7	+13 42	10.3	10.8	F ₈	1	..	4413m
14	1620	52.5	-20 0	9.18	8.9	A ₀	4	..	12631b	64	1496	52.7	+13 27	9.9	10.9	K ₀	1	..	4413m
15	1633	52.5	-21 1	10.1	9.3	A	1	..	12631b	65	1483	52.7	+2 26	7.7	7.8	A ₂	6	R	37700i
16	4629	52.5	-24 44	8.7	9.0	F ₅	4	..	20582b	66	1483	52.7	+2 26	7.7	7.8	G	6	R	37700i
17	3814	52.5	-25 4	9.7	10.4	K ₀	1	..	24433b	67	1734	52.7	+0 26	9.3	9.3	B ₈	3	..	20867b
18	3813	52.5	-25 47	7.82	8.7	K ₀	7	..	20582b	68	1736	52.7	+0 11	8.9	9.9	K	1	..	20867b
19	3818	52.5	-26 1	9.5	9.7	F ₈	3	..	24433b	69	1892	52.7	-5 19	9.1	9.1	B ₈	6	..	20895b
20	3436	52.5	-27 38	10.4	9.9	A ₀	3	..	24433b	70	..	52.7	-6 17	..	..	Ma	..	..	M
21	3434	52.5	-27 47	11.6	10.4	A ₀	2	..	24433b	71	1749	52.7	-9 12	10.1	10.1	A ₀	2	..	20895b
22	3671	52.5	-29 35	10.7	9.8	A ₀	2	..	20582b	72	1699	52.7	-17 25	8.0	8.0	B ₉	4	1,8	8909b
23	3709	52.5	-30 27	10.7	10.7	G	2	..	24433b	73	1622	52.7	-19 18	6.75	7.0	F ₅	8	3,3	12631b
24	3219	52.5	-35 34	8.7	9.8	K ₀	2	..	20534b	74	1663	52.7	-21 35	10.3	9.5	B ₈	1	..	12631b
25	2949	52.5	-39 31	10.2	10.1	A ₀	2	..	20534b	75	4634	52.7	-24 23	10.2	8.7	A ₀	4	..	20582b
26	666	52.5	-65 18	8.7	8.7	A ₀	5	..	15223b	76	4635	52.7	-24 50	8.22	9.0	K ₅	3	..	20582b
27	1026	52.6	+57 44	8.5	8.9	F ₅	5	..	37526i	77	3676	52.7	-29 9	10.9	11.0	G ₅	1	..	24433b
28	1631	52.6	+42 2	8.6	8.6	A ₀	2	..	37501i	78	3679	52.7	-29 17	9.7	9.5	F ₅	2	..	20582b
29	1287	52.6	+28 47	8.6	9.7	K ₂	2	..	37478i	79	2765	52.7	-46 21	8.6	9.4	K ₅	4	..	38414b
30	1405	52.6	+26 13	6.10	6.52	F ₅	7	..	38185i	80	2508	52.7	-49 26	10.2	11.1	G ₅	1	..	38414b
31	1559	52.6	+19 22	7.43	8.50	K ₂	3	E	37441i	81	410	52.7	-75 20	9.9	10.0	A ₃	3	..	20652b
32	..	52.6	+16 22	..	..	F	1	..	4413m	82	1629	52.8	+37 14	7.7	7.7	A ₀	4	1,7	37527i
33	1513	52.6	+14 24	7.3	7.4	A ₅	5	3,7	36977i	83	1461	52.8	+17 37	8.7	10.1	Ma	..	..	M
34	1512	52.6	+14 21	8.2	9.0	G ₅	3	..	4413m	84	..	52.8	+16 37	..	..	F	1	..	4413m
35	1495	52.6	+13 24	8.3	8.4	A ₅	4	5,4	36963i	85	..	52.8	+16 28	..	..	Pec.	1	R	4413m
36	1494	52.6	+13 13	8.9	9.9	K ₀	5	2,1	4413m	86	1591	52.8	+8 1	8.4	9.4	K ₀	3	..	15139b
37	1644	52.6	-7 9	8.7	8.7	B ₉	5	..	20895b	87	1612	52.8	+1 21	8.7	8.7	B ₈	3	..	37652i
38	1644	52.6	-8 17	9.1	9.2	A ₂	5	0,1	20895b	88	1649	52.8	-7 40	8.9	9.7	G ₅	2	..	20895b
39	1747	52.6	-9 20	9.2	9.2	B ₉	3	..	20895b	89	1665	52.8	-21 5	9.4	8.7	A ₀	4	..	12631b
40	1745	52.6	-9 57	8.56	9.06	F ₈	3	..	20895b	90	3683	52.8	-29 36	8.9	9.8	K ₅	2	..	20582b
41	1779	52.6	-10 48	8.7	8.7	B ₉	7	..	24340b	91	1579	52.9	+49 32	9.2	9.3	A ₂	1	..	37515i
42	1778	52.6	-10 59	9.4	9.4	B ₈	3	..	24340b	92	1632	52.9	+42 1	7.6	8.0	F ₅	6	0,3	37501i
43	1659	52.6	-14 35	9.1	9.1	A ₀	4	..	18975b	93	1421	52.9	+29 26	9.1	9.4	F	1	..	37478i
44	1573	52.6	-15 36	8.3	8.3	A ₀	7	2,3	18975b	94	1453	52.9	+21 45	7.9	8.9	K ₀	2	..	37441i
45	1672	52.6	-16 21	9.1	9.5	F ₅	4	..	18975b	95	1515	52.9	+14 47	9.9	11.0	K ₂	1	..	4413m
46	1671	52.6	-16 58	7.06	8.06	K ₀	5	..	18975b	96	1737	52.9	+0 31	7.9	8.0	A ₂	6	..	37652i
47	1612	52.6	-18 27	9.2	9.8	Go	2	..	18975b	97	1854	52.9	-2 34	9.8	9.8	A ₀	3	..	20867b
48	1621	52.6	-19 35	8.5	8.7	K ₀	3	..	12631b	98	1713	52.9	-12 45	9.8	9.8	A ₀	2	..	24340b
49	1634	52.6	-20 58	8.1	7.4	B ₅	7	0,3	12631b	99	1673	52.9	-16 15	8.1	8.9	G ₅	6	..	18975b
50	4628	52.6	-23 50	var.	var.	Mc	3	R	24433b	100	1613	52.9	-18 6	9.1	9.7	Go	2	..	18975b

THE HENRY DRAPER CATALOGUE.

51600

6^h 52^m.9

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	4636	52.9	-23 37	9.2	8.3	Fo	6	2,6	12631b	51	1676	53.1	-16 23	9.1	9.1	A	3	..	18975b
2	3623	52.9	-26 35	8.7	9.7	K5	4	..	24433b	52	1677	53.1	-16 45	8.1	8.2	A5	6	..	8909b
3	3712	52.9	-30 18	10.2	9.9	G	2	..	24433b	53	1640	53.1	-20 19	9.6	9.8	G5	1	..	12631b
4	3818	52.9	-31 15	7.9	9.5	K2	2	E	20582b	54	1670	53.1	-21 37	9.6	9.2	B8	4	..	12631b
5	3176	52.9	-37 24	8.4	8.0	Ao	7	..	20534b	55	4640	53.1	-23 22	9.0	9.0	Ko	2	5,2	20582b
6	3175	52.9	-37 42	9.0	8.6	Ao	5	..	20534b	56	3828	53.1	-25 23	11.2	10.4	B9	2	..	24433b
7	3028	52.9	-38 29	7.44	7.5	Ao	9	..	20534b	57	3627	53.1	-26 12	10.4	10.1	A2	2	..	24433b
8	1095	52.9	-55 8	8.37	8.9	G5	5	..	13007b	58	3628	53.1	-26 52	9.5	9.7	Go	3	..	24433b
9	345	53.0	+72 49	9.2	10.0	G5	2	..	37559i	59	3444	53.1	-27 10	10.2	9.6	A2	2	..	20582b
10	1154	53.0	+55 27	var.	var.	Pec.	4	R	37526i	60	731	53.1	-62 57	8.8	9.9	K2	2	..	15176b
11	1630	53.0	+43 7	8.8	9.8	Ko	2	..	37501i	61	227	53.2	+80 42	8.7	8.7	Ao	3	..	37546i
12	1633	53.0	+42 19	7.7	8.0	Fo	5	..	37501i	62	1465	53.2	+48 19	8.5	9.3	G5	1	R	37515i
13	1445	53.0	+33 42	8.7	8.7	Ao	3	..	37527i	63	1630	53.2	+37 5	10.0	11.0	Ko	1	..	37447i
14	1446	53.0	+33 12	8.0	8.6	Go	3	..	37527i	64	1345	53.2	+16 46	9.6	10.6	Ko	2	..	4413m
15	1455	53.0	+21 12	8.2	8.3	A5	3	..	37441i	65	1398	53.2	+15 24	10.3	11.3	K	1	..	4413m
16	1394	53.0	+15 31	10.3	10.4	A2	2	..	4413m	66	1399	53.2	+15 5	10.3	10.3	Ao	1	..	4413m
17	1395	53.0	+15 2	9.3	9.7	F5	5	..	4413m	67	1517	53.2	+14 35	9.9	10.7	G5	1	..	4413m
18	1498	53.0	+13 10	10.3	11.1	G5	1	..	4413m	68	1501	53.2	+13 47	10.3	11.3	K	1	..	4413m
19	1538	53.0	+7 55	8.4	8.7	Fo	2	..	37652i	69	1499	53.2	+13 37	10.3	10.4	A3	1	..	4413m
20	1462	53.0	+6 18	var.	var.	Nb	2	R	37652i	70	1494	53.2	+5 16	8.5	8.5	A	1	..	37652i
21	1484	53.0	+2 32	8.7	8.7	B8	2	..	37652i	71	1488	53.2	+2 33	9.3	9.3	B8	2	..	37652i
22	1476	53.0	-1 39	9.6	9.7	A3	2	..	20867b	72	1516	53.2	-0 24	8.7	8.7	B9	3	..	20867b
23	1848	53.0	-6 19	8.9	8.9	Ao	6	..	20895b	73	1750	53.2	-4 56	8.70	8.98	Fo	5	..	20895b
24	1647	53.0	-8 45	9.6	9.6	B9	2	..	20895b	74	1850	53.2	-6 25	9.6	10.2	Go	2	..	20895b
25	1783	53.0	-10 55	9.6	9.6	B8	2	..	24340b	75	1662	53.2	-14 48	9.0	9.1	A5	2	..	46170b
26	1714	53.0	-12 11	8.5	9.5	Ko	7	..	24340b	76	1642	53.2	-20 55	7.9	8.4	F8	6	..	12631b
27	1675	53.0	-16 53	9.2	9.3	A2	2	..	18975b	77	4642	53.2	-23 52	10.0	9.5	Ko	2	..	24433b
28	1674	53.0	-16 58	8.9	9.0	A5	4	..	18975b	78	3834	53.2	-25 18	10.7	10.2	A2	2	..	24433b
29	1614	53.0	-18 13	9.2	9.3	A2	3	R	18975b	79	3833	53.2	-25 37	9.7	10.4	Ko	1	..	24433b
30	1616	53.0	-22 4	6.37	6.2	B8	6	5,10	8902b	80	3829	53.2	-25 41	8.0	8.7	Ko	5	..	20582b
31	4640	53.0	-24 19	9.0	9.1	G	5	R	24433b	81	3721	53.2	-30 45	8.7	8.4	Ao	4	..	20582b
32	4639	53.0	-25 1	8.30	9.0	K5	4	..	20582b	82	3225	53.2	-35 13	6.28	7.7	Ko	8	..	20534b
33	3631	53.0	-28 34	7.7	8.7	Go	5	..	20582b	83	2793	53.2	-40 40	9.4	9.2	F5	3	..	20534b
34	3714	53.0	-30 21	9.5	10.7	G	2	R	24433b	84	2796	53.2	-40 51	7.6	8.1	Fo	8	E	20534b
35	669	53.0	-65 44	9.0	9.3	Fo	3	..	15223b	85	732	53.2	-62 20	8.0	8.8	G5	5	..	18486b
36	620	53.0	-66 13	10.1	10.1	A	1	..	15223b	86	1264	53.3	+51 53	8.9	9.0	A3	1	..	37515i
37	613	53.1	+64 5	9.2	9.2	B9	4	..	37545i	87	1635	53.3	+42 23	8.6	9.0	F5	2	..	37501i
38	1155	53.1	+54 59	6.76	6.71	B8	9	..	37526i	88	1411	53.3	+26 3	6.29	6.27	B9	8	..	38185i
39	1464	53.1	+48 37	8.8	9.4	Go	1	..	37515i	89	1525	53.3	+25 23	8.8	9.4	G	3	R	37478i
40	1533	53.1	+35 37	8.6	8.7	A5	3	..	37527i	90	1524	53.3	+25 22	8.2	8.8				
41	1397	53.1	+15 12	9.6	9.7	A2	2	..	4413m	91	1435	53.3	+18 52	8.3	8.4	A3	2	..	37441i
42	..	53.1	+14 35	..	..	Ao	1	..	4413m	92	1400	53.3	+15 36	10.3	10.6	F	2	..	4413m
43	..	53.1	+14 5	..	..	A	1	..	4413m	93	1539	53.3	+7 45	6.10	6.16	A2	8	..	37652i
44	1493	53.1	+5 10	9.1	9.1	A	1	..	37652i	94	1613	53.3	+1 9	9.6	9.6	Ao	1	..	20867b
45	1522	53.1	+4 2	7.4	8.4	Ko	5	..	37652i	95	1739	53.3	+0 7	8.7	9.7	Ko	2	..	37700i
46	1749	53.1	-4 47	9.2	9.3	A5	4	..	20895b	96	1517	53.3	-0 13	8.9	9.0	A2	3	..	20867b
47	1653	53.1	-7 4	9.4	9.4	Ao	3	R	20895b	97	1751	53.3	-4 31	9.1	9.1	B8	2	..	20895b
48	1716	53.1	-12 44	10.1	10.1	Ao	1	..	24340b	98	1655	53.3	-7 42	9.2	10.6	Ma	..	..	M
49	1661	53.1	-14 9	9.1	9.1	Ao	2	..	18975b	99	1755	53.3	-9 49	9.1	9.2	A2	3	..	20895b
50	1678	53.1	-16 21	8.5	8.5	B9	8	..	18975b	100	1786	53.3	-10 39	6.78	7.78	Ko	2	0,9	8909b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

51700

6^h 53^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1643	53.3	-20 21	9.8	9.8	Ko	1	..	12631b	51	1518	53.5	+14 15	9.6	10.2	Go	3	..	4413m
2	3221	53.3	-34 16	8.5	9.0	K2	3	..	20534b	52	1595	53.5	+8 49	8.7	8.8	A5	4	..	15139b
3	3034	53.3	-38 51	9.3	9.5	F5	4	..	20534b	53	1594	53.5	+8 45	8.9	9.0	A2	2	..	15139b
4	2958	53.3	-39 59	9.4	9.5	Ao	3	..	20534b	54	1520	53.5	-0 18	9.6	10.2	Go	3	..	20867b
5	2688	53.3	-47 22	9.1	9.1	Go	4	..	38414b	55	1480	53.5	-1 28	8.8	8.8	Ao	5	..	20867b
6	2513	53.3	-49 57	7.9	9.6	Ma	4	..	38414b	56	1856	53.5	-2 53	7.7	7.5	B3	10	..	20867b
7	2166	53.3	-51 22	10.0	10.5	K2	1	..	38414b	57	1894	53.5	-5 40	9.8	9.8	Ao	2	..	20895b
8	470	53.4	+67 36	8.0	8.6	Go	5	..	37545i	58	1657	53.5	-7 22	8.7	9.0	Fo	5	..	20895b
9	1631	53.4	+43 6	8.8	8.8	Ao	4	..	375ori	59	1656	53.5	-7 48	9.4	9.4	B9	2	..	20895b
10	1636	53.4	+42 13	7.8	8.6	G5	5	7,2 R	375ori	60	1579	53.5	-15 37	9.8	10.1	F	1	..	18975b
11	1564	53.4	+41 9	8.2	8.3	A2	4	..	375ori	61	4649	53.5	-23 19	8.7	8.1	Ao	6	..	12631b
12	1534	53.4	+35 25	8.7	9.5	G5	2	..	37447i	62	4648	53.5	-23 31	11.4	9.5	Ao	3	..	24433b
13	1447	53.4	+33 23	8.6	9.6	Ko	2	..	37527i	63	4652	53.5	-24 33	10.4	9.4	Ao	4	..	24433b
14	1562	53.4	+23 14	8.6	9.7	K2	1	..	38238i	64	3638	53.5	-26 53	10.7	9.6	A3	3	..	24433b
15	..	53.4	+16 56	..	..	A	1	..	4413m	65	3639	53.5	-27 0	8.1	9.6	K5	2	..	20582b
16	1347	53.4	+16 16	7.7	8.5	G5	7	..	4413m	66	3640	53.5	-28 2	10.9	10.2	Ao	2	..	24433b
17	1346	53.4	+16 10	7.6	8.7	K2	5	2,4	4413m	67	2807	53.5	-43 38	9.0	9.7	G5	1	..	20556b
18	1401	53.4	+15 42	8.7	8.8	A2	5	3,1	4413m	68	2691	53.5	-47 40	9.2	9.1	A2	5	..	38414b
19	1402	53.4	+15 18	9.3	10.4	K2	2	..	4413m	69	2470	53.5	-50 28	9.8	9.9	A5	2	..	38414b
20	1502	53.4	+13 51	8.8	9.6	G5	4	..	4413m	70	1194	53.5	-53 30	8.2	9.2	Ko	1	..	10697b
21	1740	53.4	+0 14	8.7	9.8	K2	2	..	20867b	71	1193	53.5	-53 32	8.5	9.0	B9	2	..	10697b
22	1752	53.4	-4 23	7.9	8.0	A5	8	0,8-	20895b	72	670	53.5	-65 47	8.4	9.8	Ma	2	..	15223b
23	1854	53.4	-6 53	9.2	9.2	Ao	3	R	20895b	73	233	53.5	-79 4	9.4	10.5	K2	4	..	20652b
24	1649	53.4	-8 42	9.1	10.2	K2	1	..	20895b	74	1265	53.6	+51 54	8.1	8.9	G5	1	..	37515i
25	1650	53.4	-8 53	7.5	8.9	Mb	6	0,7-	20895b	75	1535	53.6	+35 36	9.0	10.0	K	1	..	37447i
26	1787	53.4	-10 11	6.81	7.88	K2	9	..	20895b	76	1459	53.6	+21 10	8.6	8.7	A2	2	..	37441i
27	1712	53.4	-11 40	9.6	10.2	G	1	..	24340b	77	1464	53.6	+17 40	8.3	9.1	G5	2	..	37441i
28	1721	53.4	-12 49	9.1	9.7	Go	3	..	24340b	78	1348	53.6	+16 33	9.6	10.6	Ko	3	..	4413m
29	1664	53.4	-14 41	8.9	10.1	K5	1	..	18975b	79	1349	53.6	+16 13	9.3	10.1	G5	2	..	4413m
30	1663	53.4	-14 48	9.2	9.2	Ao	2	2,2	46170b	80	..	53.6	+14 17	..	..	F	1	..	4413m
31	1625	53.4	-19 11	9.0	9.5	K2	1	..	12631b	81	1503	53.6	+13 7	8.9	8.9	Ao	5	2,1	4413m
32	1617	53.4	-23 1	7.9	8.0	Go	7	..	12631b	82	1521	53.6	-0 51	8.9	8.9	B9	4	..	37700i
33	4648	53.4	-24 30	5.43	6.3	F5	..	3,7	28,199	83	1756	53.6	-4 23	8.1	9.3	K5	4	..	20895b
34	3453	53.4	-27 4	8.3	9.0	Ko	5	..	20582b	84	1855	53.6	-6 22	8.7	9.5	G5	3	..	20895b
35	3451	53.4	-27 42	10.2	9.7	Ao	2	..	20582b	85	1760	53.6	-9 9	9.8	9.8	B8	2	..	20895b
36	3637	53.4	-28 13	11.8	9.9	Ao	3	..	24433b	86	1761	53.6	-10 3	8.26	8.26	Ao	7	..	20895b
37	3691	53.4	-29 21	8.7	8.9	Ko	4	..	20582b	87	1788	53.6	-10 49	9.2	9.2	Ao	3	..	24340b
38	3722	53.4	-30 22	10.2	9.8	K5	2	..	20582b	88	1722	53.6	-12 52	9.1	9.1	Ao	3	..	24340b
39	3723	53.4	-30 22	10.2	9.9	K5	2	..	20582b	89	1665	53.6	-14 21	9.2	9.2	Ao	3	..	18975b
40	3229	53.4	-35 58	9.1	9.9	G5	1	..	20534b	90	1675	53.6	-21 47	9.2	8.6	B5	5	..	12631b
41	2959	53.4	-39 20	9.3	9.5	A5	3	..	20534b	91	3458	53.6	-27 15	11.4	10.4	Ao	2	..	24433b
42	2839	53.4	-42 5	8.9	9.2	Ao	4	..	20556b	92	3459	53.6	-27 48	11.2	10.4	Ao	1	..	24433b
43	2776	53.4	-46 52	10.0	10.0	G5	2	..	38414b	93	3642	53.6	-28 16	9.2	9.9	G5	3	..	24433b
44	2168	53.4	-51 17	9.8	9.3	Ao	4	..	38414b	94	3698	53.6	-29 58	10.7	9.5	A3	2	..	20582b
45	1196	53.4	-56 29	9.8	9.8	Ao	2	..	13007b	95	3226	53.6	-34 40	10.7	9.8	A	1	..	20534b
46	241	53.4	-78 42	9.4	9.8	F5	5	..	20652b	96	3039	53.6	-38 5	10.0	9.6	Ao	2	..	20534b
47	1538	53.5	+22 49	9.1	9.1	Ao	1	..	38238i	97	2777	53.6	-46 39	9.8	10.0	G5	2	..	38414b
48	1539	53.5	+22 23	8.7	9.8	K2	1	..	38238i	98	2693	53.6	-48 0	10.0	10.0	A2	2	..	38414b
49	1661	53.5	+20 35	8.2	9.0	G5	1	..	37441i	99	2601	53.6	-48 35	4.88	6.6	Ma	..	..	28,199
50	1403	53.5	+15 11	9.9	10.2	F2	3	..	4413m	100	797	53.6	-58 48	9.0	9.5	Go	2	..	13007b

THE HENRY DRAPER CATALOGUE.

51800

6^h 53^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	574	53.6	-70 23	7.5	8.5	Ko	5	..	15168b	51	1706	53.8	-17 55	9.1	10.1	Ko	1	..	18975b
2	51	53.7	+87 12	5.26	6.61	Ma	..	5,8-	2629c	52	1628	53.8	-19 57	9.45	9.2	A2	3	..	12631b
3	381	53.7	+71 37	8.9	9.4	F8	2	..	37559i	53	1679	53.8	-21 23	9.1	9.3	K2	3	..	12631b
4	402	53.7	+69 3	8.2	8.7	F8	3	E	37559i	54	1623	53.8	-22 44	9.2	8.3	B5	4	..	12631b
5	1770	53.7	+40 30	7.67	7.67	Ao	7	..	37501i	55	3641	53.8	-26 18	8.7	8.8	Fo	5	..	20582b
6	1450	53.7	+33 31	10.0	10.5	F8	2	..	37447i	56	3647	53.8	-28 54	10.2	10.1	Ko	1	..	24433b
7	..	53.7	+17 6	..	..	Ko	1	..	4413m	57	3704	53.8	-29 39	10.2	9.5	Ao	3	..	24433b
8	..	53.7	+15 50	..	..	Ao	1	..	4413m	58	3733	53.8	-30 13	10.2	9.9	G	2	..	24433b
9	1404	53.7	+15 43	8.2	8.2	Ao	7	..	4413m	59	3374	53.8	-33 8	10.0	9.8	A	1	E	18926b
10	..	53.7	+15 24	..	..	Ko	1	..	4413m	60	2962	53.8	-39 42	9.6	9.5	Ao	5	..	20534b
11	1464	53.7	+ 9 52	8.97	8.97	Ao	4	..	15139b	61	2780	53.8	-46 3	10.0	10.0	F2	2	..	38414b
12	1499	53.7	+ 5 47	8.5	8.5	Ao	2	..	37700i	62	2474	53.8	-50 26	10.0	10.5	A2	1	..	38414b
13	1498	53.7	+ 5 41	8.3	8.9	G	2	..	37652i	63	647	53.8	-63 2	8.5	9.5	Ko	3	..	15176b
14	1488	53.7	+ 3 45	6.02	7.02	Ko	8	..	37652i	64	670	53.8	-69 56	9.6	9.7	A2	2	..	15168b
15	1856	53.7	- 6 28	9.1	9.1	Ao	4	..	20895b	65	1156	53.9	+55 15	8.96	8.96	Ao	3	..	37526i
16	1651	53.7	- 8 9	8.9	9.0	A2	7	0,2	20895b	66	1469	53.9	+48 33	8.2	9.2	Ko	2	..	37515i
17	1652	53.7	- 9 1	9.4	9.7	F2	2	..	20895b	67	1545	53.9	+36 56	9.5	10.1	Go	2	..	37447i
18	1789	53.7	-10 30	8.7	8.8	A3	6	..	20895b	68	1407	53.9	+15 50	9.6	10.6	Ko	1	..	4413m
19	1645	53.7	-20 50	9.4	8.9	B9	3	..	12631b	69	1406	53.9	+15 26	8.7	8.8	A3	7	..	4413m
20	1678	53.7	-21 15	9.6	9.2	Ao	2	..	12631b	70	1742	53.9	+ 0 3	8.68	8.66	B9	3	..	37700i
21	4658	53.7	-23 45	10.4	9.3	B9	3	1,2	24433b	71	1672	53.9	- 3 52	7.9	7.9	Ao	4	0,9	38609i
22	3843	53.7	-25 12	11.2	10.2	Ao	1	..	24433b	72	1760	53.9	- 4 32	9.6	9.6	B9	3	..	20895b
23	3460	53.7	-27 24	6.09	6.5	B3	5	..	4530b	73	1861	53.9	- 6 13	9.1	10.1	Ko	2	..	20895b
24	3840	53.7	-31 15	8.3	8.6	K2	3	E	20582b	74	1764	53.9	-10 2	8.91	9.19	Fo	3	..	24340b
25	3233	53.7	-35 23	6.19	6.7	F5	6	0,9	7406b	75	1791	53.9	-10 57	9.0	9.1	A2	4	..	24340b
26	3252	53.7	-36 45	7.43	7.1	B5	8	..	20534b	76	1581	53.9	-15 55	7.04	7.02	B9	5	..	8909b
27	2779	53.7	-47 0	9.6	10.0	Ko	2	..	38414b	77	1707	53.9	-17 8	9.6	9.7	A2	2	..	18975b
28	2604	53.7	-48 4	9.2	10.5	Ko	2	..	38414b	78	1680	53.9	-21 44	8.7	8.6	Fo	6	..	12631b
29	2603	53.7	-48 51	9.0	11.1	K2	1	..	38414b	79	3650	53.9	-28 56	10.2	9.7	A3	3	..	24433b
30	737	53.7	-62 1	8.9	9.0	A2	3	..	18486b	80	3375	53.9	-33 15	9.0	9.2	F8	2	E	18926b
31	898	53.8	+62 47	8.5	8.8	F2	3	..	37545i	81	3227	53.9	-34 56	8.85	9.2	G5	2	..	20534b
32	928	53.8	+61 27	7.72	8.06	F2	7	..	37526i	82	2690	53.9	-41 47	9.3	9.2	Ao	3	..	20556b
33	1387	53.8	+30 26	7.76	8.54	Ko	3	2,2-	37447i	83	2815	53.9	-43 55	9.1	9.7	Ko	1	..	20556b
34	1425	53.8	+29 55	7.36	8.36	Ko	3	..	37527i	84	2782	53.9	-46 42	9.4	9.4	A3	3	..	38414b
35	1405	53.8	+15 56	10.3	11.4	K2	1	..	4413m	85	431	54.0	+70 47	9.0	9.0	Ao	3	..	37559i
36	..	53.8	+15 24	..	..	G5	1	..	4413m	86	1292	54.0	+27 2	7.8	8.8	Ko	5	E	38185i
37	1519	53.8	+14 28	8.4	8.4	Ao	6	0,2	4413m	87	..	54.0	+16 59	..	..	A	1	..	4413m
38	1504	53.8	+13 16	9.9	11.0	K2	1	..	4413m	88	1350	54.0	+16 18	8.9	9.9	Ko	4	..	4413m
39	1500	53.8	+ 5 26	7.9	8.7	G5	3	..	37652i	89	..	54.0	+16 0	..	..	A	1	..	4413m
40	1616	53.8	+ 1 5	9.3	9.3	B8	3	..	20867b	90	1520	54.0	+14 7	9.6	10.6	Ko	1	..	4413m
41	1483	53.8	- 1 14	9.3	9.3	Ao	3	..	20867b	91	1505	54.0	+13 31	10.3	10.7	F5	2	..	4413m
42	1482	53.8	- 1 41	8.5	9.6	K2	2	..	20867b	92	1544	54.0	+ 7 27	6.33	6.28	B8	8	..	37652i
43	1671	53.8	- 3 21	9.8	10.8	Ko	1	..	20867b	93	1529	54.0	+ 4 35	8.9	8.9	Ao	3	..	37700i
44	1759	53.8	- 4 25	9.1	9.4	Fo	5	..	20895b	94	1861	54.0	- 3 1	9.8	9.8	Ao	3	..	20867b
45	1859	53.8	- 7 2	7.08	7.64	Go	3	5,9	38609i	95	1673	54.0	- 3 21	9.8	9.8	Ao	3	..	20867b
46	1660	53.8	- 7 23	9.8	9.9	A3	2	..	20895b	96	1715	54.0	-11 33	9.4	9.8	F5	4	..	24340b
47	1661	53.8	- 7 51	9.1	10.1	Ko	1	..	20895b	97	1716	54.0	-11 41	9.6	10.7	K2	2	..	24340b
48	1714	53.8	-11 17	8.5	8.6	A2	2	..	8909b	98	1650	54.0	-20 23	8.9	8.3	B5	5	..	12631b
49	1724	53.8	-12 51	9.1	10.1	Ko	1	..	24340b	99	3846	54.0	-31 4	10.2	9.8	Ao	3	..	24433b
50	1705	53.8	-17 38	7.9	8.9	Ko	5	5,2	18975b	100	3376	54.0	-33 26	8.7	8.6	F8	4	E	18926b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

51900

6^h 54^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3238	54.0	-35 20	7.06	8.3	Ko	4	..	20534b	51	1042	54.3	+59 0	9.0	9.8	G5	1	..	37526i
2	2965	54.0	-40 0	9.30	9.6	A3	3	..	20534b	52	1029	54.3	+57 53	9.5	10.3	G5	1	..	38239i
3	2173	54.0	-51 30	9.6	9.7	G5	3	..	38414b	53	1634	54.3	+43 50	9.0	9.8	G5	2	..	37501i
4	1102	54.0	-55 28	9.5	9.9	F5	2	..	13007b	54	..	54.3	+16 11	..	..	A3	3	..	4413m
5	622	54.0	-66 51	9.8	9.9	A2	2	..	15223b	55	1398	54.3	+11 57	7.7	8.8	K2	2	..	36977i
6	539	54.0	-72 4	9.0	10.0	Ko	2	..	15168b	56	1622	54.3	+1 4	7.69	8.69	Ko	4	..	37652i
7	413	54.0	-75 36	9.4	10.4	Ko	2	..	20652b	57	1487	54.3	-1 13	10.3	10.3	B9	2	..	20867b
8	1268	54.1	+51 26	8.7	8.8	A2	2	..	37515i	58	1763	54.3	-4 28	9.1	10.3	K5	1	..	20895b
9	1632	54.1	+37 17	8.7	9.0	F2	4	..	37447i	59	1863	54.3	-6 58	9.2	10.2	Ko	1	..	20895b
10	1538	54.1	+35 13	9.4	10.2	G5	3	..	37447i	60	1665	54.3	-8 2	9.2	9.2	B8	3	..	20895b
11	1352	54.1	+16 5	7.01	7.57	Go	4	2,9	37447i	61	1794	54.3	-10 44	10.2	10.2	B9	2	..	24340b
12	1761	54.1	-4 15	9.1	9.1	Ao	4	..	20895b	62	4674	54.3	-23 57	10.2	9.8	Ao	2	..	24433b
13	1765	54.1	-9 12	9.0	9.0	B8	4	..	20895b	63	3652	54.3	-26 41	10.2	10.4	K5	1	..	24433b
14	1768	54.1	-9 54	8.26	9.26	Ko	3	..	24340b	64	3743	54.3	-30 37	7.13	8.0	G5	5	..	20582b
15	1769	54.1	-9 57	9.2	9.2	B9	3	..	24340b	65	3048	54.3	-38 38	10.4	9.9	F2	2	..	20534b
16	1717	54.1	-11 50	9.4	9.4	Ao	4	..	24340b	66	2970	54.3	-39 32	9.3	9.8	A2	4	..	20534b
17	1725	54.1	-12 22	9.1	10.1	Ko	1	..	24340b	67	2478	54.3	-50 37	8.4	7.6	B8	7	..	38414b
18	1754	54.1	-13 43	8.4	9.6	K5	3	..	24340b	68	2477	54.3	-50 53	7.6	8.1	Ko	7	..	38414b
19	1685	54.1	-16 10	8.5	9.5	Ko	3	..	18975b	69	1024	54.4	+60 46	8.6	8.7	A2	4	..	38239i
20	1686	54.1	-17 0	8.6	9.6	Ko	2	..	18975b	70	1270	54.4	+51 43	7.50	8.50	Ko	4	..	37515i
21	1618	54.1	-18 3	9.2	9.2	B8	4	..	18975b	71	1441	54.4	+18 49	8.9	8.9	A	1	..	37447i
22	4663	54.1	-24 11	8.9	9.1	Ko	5	..	24433b	72	1353	54.4	+16 32	10.3	10.9	Go	3	..	4413m
23	3857	54.1	-25 17	10.9	10.2	Fo	1	..	24433b	73	1409	54.4	+15 52	8.3	9.3	Ko	6	..	4413m
24	3855	54.1	-25 30	9.2	10.1	K5	2	..	24433b	74	1508	54.4	+13 37	9.1	9.4	Fo	4	..	4413m
25	3646	54.1	-27 2	6.19	6.3	B3	..	0,4	28,199	75	1509	54.4	+13 18	10.3	11.3	K	1	..	4413m
26	3468	54.1	-27 53	10.9	10.2	Ao	2	..	24433b	76	1547	54.4	+7 24	8.5	8.9	F5	2	..	37652i
27	3739	54.1	-30 18	9.5	9.8	K2	3	..	24433b	77	1900	54.4	-5 16	8.1	8.1	Ao	7	0,4	20895b
28	3255	54.1	-36 31	10.7	9.9	Ao	1	..	20534b	78	1795	54.4	-10 39	8.5	8.5	B9	7	..	24340b
29	1199	54.1	-56 50	7.4	8.1	F8	8	..	13007b	79	1758	54.4	-13 55	9.4	9.4	B8	2	..	24340b
30	1771	54.2	+40 10	8.0	8.4	F5	2	E	37501i	80	1669	54.4	-14 49	8.1	8.1	Ao	2	..	8909b
31	1461	54.2	+21 15	8.8	8.9	A3	2	..	38238i	81	1709	54.4	-17 29	8.1	8.1	B9	7	0,3	18975b
32	..	54.2	+14 19	..	..	A	1	..	4413m	82	1635	54.4	-19 11	8.9	8.6	Ao	6	..	12631b
33	1522	54.2	+14 1	10.3	10.3	Ao	2	..	4413m	83	1654	54.4	-20 29	8.3	8.9	K5	3	..	12631b
34	1471	54.2	+6 4	8.8	8.8	Ao	2	..	37700i	84	1627	54.4	-22 23	9.2	9.0	B9	4	..	12631b
35	1485	54.2	-1 24	8.9	9.9	Ko	2	..	20867b	85	4677	54.4	-23 10	10.2	9.2	B9	2	..	12631b
36	1674	54.2	-3 5	9.2	10.4	K5	3	..	20867b	86	4678	54.4	-23 45	6.58	7.5	Ao	2	0,10	4530b
37	1862	54.2	-6 58	9.1	9.9	G5	2	..	20895b	87	3654	54.4	-27 2	8.7	8.7	Ao	4	..	20582b
38	1654	54.2	-8 16	9.8	9.8	Ao	1	..	20895b	88	3717	54.4	-29 30	9.5	9.9	G5	2	..	24433b
39	1793	54.2	-10 5	8.91	8.89	B9	5	..	24340b	89	3744	54.4	-30 56	8.4	9.8	K2	2	..	24433b
40	1792	54.2	-10 27	9.6	9.6	Ao	3	..	24340b	90	3259	54.4	-36 53	8.4	8.0	A5	5	..	20534b
41	1755	54.2	-13 43	9.4	9.4	Ao	2	..	24340b	91	3050	54.4	-38 58	10.4	9.8	Ao	3	..	20534b
42	1583	54.2	-15 8	9.2	9.3	A3	2	..	18975b	92	2972	54.4	-39 3	9.8	9.2	A2	4	..	20534b
43	1633	54.2	-19 57	9.4	9.2	F8	3	..	12631b	93	2971	54.4	-39 14	10.4	10.1	Ao	2	..	20534b
44	1683	54.2	-21 54	9.4	9.2	Go	2	..	12631b	94	2694	54.4	-41 10	9.0	9.6	G5	1	..	20556b
45	3649	54.2	-26 4	10.2	10.4	G5	1	..	24433b	95	2823	54.4	-43 6	9.1	8.8	A5	5	..	20556b
46	3713	54.2	-29 10	10.2	10.4	Ko	2	..	24433b	96	1084	54.4	-57 38	8.5	9.2	F5	3	..	13007b
47	2845	54.2	-42 26	9.6	9.6	Go	2	..	20671b	97	675	54.4	-68 2	9.0	9.1	A2	3	..	15168b
48	2785	54.2	-46 41	8.9	9.1	Fo	4	..	38414b	98	680	54.5	+63 56	10.2	10.5	F	2	..	37545i
49	2699	54.2	-47 25	10.0	10.0	Fo	3	..	38414b	99	1094	54.5	+53 31	7.42	7.37	B8	7	E	37526i
50	801	54.2	-58 17	8.9	9.7	Ko	1	..	13007b	100	1381	54.5	+49 59	8.47	9.65	K5	1	..	37515i

THE HENRY DRAPER CATALOGUE.

52000

6^h 54^m .5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1381	54.5	+47 15	8.2	8.2	Ao	4	..	37438i	51	1726	54.6	-12 8	9.1	10.2	K2	4	..	24340b
2	1567	54.5	+44 1	8.4	9.4	Ko	4	..	37501i	52	1670	54.6	-14 20	8.9	9.2	Fo	4	..	18975b
3	1548	54.5	+35 59	9.5	9.5	A	2	..	37527i	53	4675	54.6	-24 23	10.9	9.6	B9	2	..	24433b
4	1453	54.5	+33 16	9.0	10.0	Ko	2	..	37447i	54	3658	54.6	-26 35	7.9	9.3	K5	3	..	20582b
5	1354	54.5	+16 13	5.86	6.93	K2	7	0.9	37441i	55	3477	54.6	-27 55	8.9	9.6	Ko	2	..	20582b
6	1410	54.5	+15 9	8.7	8.8	A3	5	R	4413m	56	3748	54.6	-30 8	9.25	9.0	F5	3	..	20582b
7	1523	54.5	+14 1	9.6	9.9	Fo	3	..	4413m	57	3261	54.6	-36 9	8.7	8.9	Ao	3	..	20534b
8	1494	54.5	+ 3 30	8.4	8.5	A2	5	..	37652i	58	3262	54.6	-36 33	9.4	10.1	K5	1	..	20534b
9	1627	54.5	+ 1 41	8.7	9.5	G5	1	..	37652i	59	2809	54.6	-40 14	9.3	9.1	A2	3	..	20534b
10	1626	54.5	+ 1 13	8.5	8.9	F5	4	..	37652i	60	2696	54.6	-41 53	7.6	8.1	A5	7	..	20556b
11	1667	54.5	- 7 7	8.7	9.7	Ko	2	..	20895b	61	2608	54.6	-48 42	8.9	8.7	B9	7	..	38414b
12	1668	54.5	- 7 19	8.1	8.1	B8	7	2.2	20895b	62	2530	54.6	-50 0	10.2	10.5	G5	1	..	38414b
13	1796	54.5	-10 34	9.6	9.6	B9	4	..	24340b	63	1085	54.6	-57 26	7.4	8.3	Go	7	0.4	13007b
14	1719	54.5	-11 31	8.9	9.3	F5	7	..	24340b	64	671	54.6	-69 7	9.0	10.0	Ko	3	..	15223b
15	1622	54.5	-18 15	9.8	9.9	A2	2	..	18975b	65	578	54.6	-70 8	9.4	9.7	Fo	2	..	15168b
16	1637	54.5	-19 17	9.2	8.6	Ao	4	..	12631b	66	234	54.6	-79 43	10.2	10.3	A2	5	..	20652b
17	4670	54.5	-24 6	10.7	10.1	Fo	2	..	24433b	67	311	54.7	+74 37	8.6	9.7	K2	2	..	37559i
18	3864	54.5	-25 17	5.66	5.49	B3	..	0.6	56,83	68	994	54.7	+58 5	7.7	8.8	K2	5	..	37526i
19	3656	54.5	-26 46	10.0	9.6	A2	3	..	24433b	69	1539	54.7	+35 9	8.5	8.6	A5	2	..	37527i
20	3472	54.5	-27 10	9.7	9.7	Ao	3	..	24433b	70	1393	54.7	+30 6	8.51	9.29	G5	2	..	37527i
21	3473	54.5	-27 28	10.9	10.1	A2	3	..	24433b	71	1296	54.7	+27 18	7.19	8.26	K2	5	E	38185i
22	3721	54.5	-29 29	11.2	11.0	Ao	1	..	24433b	72	1356	54.7	+16 40	9.6	9.6	Ao	6	..	4413m
23	2807	54.5	-40 16	9.6	9.6	Ao	2	..	20534b	73	1355	54.7	+15 59	9.9	11.0	K2	1	..	4413m
24	2824	54.5	-43 39	7.4	7.2	B9	9	..	20556b	74	1416	54.7	+15 26	6.76	7.94	K5	3	5.9	37441i
25	2791	54.5	-46 23	9.6	10.0	K2	1	..	38414b	75	1415	54.7	+15 6	9.9	11.0	K2	2	..	4413m
26	2790	54.5	-46 38	8.5	9.4	Ko	3	..	38414b	76	1511	54.7	+13 26	9.3	10.1	G5	3	..	4413m
27	2527	54.5	-49 56	8.14	7.6	B9	8	..	38414b	77	1475	54.7	+ 9 9	8.9	9.4	F8	2	..	15139b
28	1104	54.5	-55 58	8.6	9.5	Go	2	..	13007b	78	1536	54.7	+ 4 14	7.8	8.8	Ko	3	..	37652i
29	194	54.6	+82 36	7.46	8.64	K5	5	0.4	3833oi	79	1677	54.7	- 3 31	9.6	10.6	Ko	2	..	20867b
30	432	54.6	+70 54	6.61	7.61	Ko	5	..	37559i	80	1767	54.7	- 4 4	9.1	9.1	Ao	3	..	20895b
31	1043	54.6	+59 26	9.2	9.8	Go	2	..	37526i	81	1799	54.7	-11 1	10.1	10.1	B8	3	..	24340b
32	1382	54.6	+50 14	8.6	9.6	Ko	4	..	37515i	82	1720	54.7	-11 21	8.7	9.9	K5	4	..	24340b
33	1458	54.6	+32 34	8.4	8.7	Fo	3	..	37527i	83	1728	54.7	-12 43	8.9	9.2	Fo	4	..	24340b
34	1295	54.6	+27 31	9.4	10.8	Ma	..	..	M	84	1587	54.7	-15 8	9.6	9.6	Ao	3	..	18975b
35	1566	54.6	+23 37	7.01	7.01	Ao	7	..	38238i	85	4685	54.7	-23 53	10.0	9.5	G5	1	..	12631b
36	1414	54.6	+15 57	8.3	9.4	K2	5	..	4413m	86	4679	54.7	-24 48	10.4	9.6	A3	3	..	24433b
37	1412	54.6	+15 41	6.69	6.64	B8	8	1.10	37441i	87	3663	54.7	-26 6	10.2	9.7	A5	2	..	24433b
38	1413	54.6	+15 32	8.9	9.9	Ko	3	..	4413m	88	3664	54.7	-26 45	8.9	9.3	Fo	3	..	20582b
39	1411	54.6	+15 28	10.3	10.3	Ao	6	..	4413m	89	3666	54.7	-28 50	1.63	1.41	B1	..	R	28,199
40	1510	54.6	+13 12	9.6	10.2	Go	2	..	4413m	90	3725	54.7	-29 28	10.9	10.4	Ao	2	..	24433b
41	1597	54.6	+ 8 28	9.6	9.7	A2	2	..	15139b	91	3751	54.7	-30 23	9.5	9.8	A2	4	..	24433b
42	1496	54.6	+ 2 51	8.7	9.7	Ko	2	..	39867b	92	3389	54.7	-33 59	5.07	4.95	B5	..	3.7 R	56,123
43	1497	54.6	+ 2 10	8.7	8.7	B9	4	..	37652i	93	3243	54.7	-35 17	7.65	7.6	B9	7	0.3	20534b
44	1744	54.6	+ 0 26	8.5	8.5	Ao	2	..	37652i	94	3052	54.7	-38 52	9.4	9.9	G5	1	..	20534b
45	1531	54.6	- 0 54	8.7	8.7	Ao	3	..	37700i	95	2850	54.7	-42 8	8.6	9.0	Ko	3	..	20556b
46	1865	54.6	- 2 36	10.1	10.1	Ao	4	..	20867b	96	2851	54.7	-42 28	7.6	7.4	A3	8	..	20556b
47	1766	54.6	- 4 40	9.1	9.4	F2	4	..	20895b	97	1152	54.7	-54 40	8.9	10.1	Ko	2	..	13007b
48	1901	54.6	- 5 26	9.1	9.1	B9	3	..	20895b	98	1383	54.8	+50 49	8.6	8.7	A2	6	..	37515i
49	1902	54.6	- 5 55	9.4	10.2	G5	1	..	20895b	99	1569	54.8	+44 36	7.12	8.12	Ko	7	..	37501i
50	1673	54.6	- 7 11	9.2	9.3	A2	2	..	20895b	100	1460	54.8	+32 32	6.46	6.74	Fo	7	..	37527i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

52100

6^h 54^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1429	54.8	+29 54	7.86	8.64	G5	4	..	37527i	51	1525	55.0	+14 46	9.6	10.8	K5	1	..	4413m
2	1491	54.8	+24 38	8.4	8.5	A2	3	..	38238i	52	1526	55.0	+14 32	9.3	9.8	F8	2	..	4413m
3	..	54.8	+14 37	..	..	A2	1	..	4413m	53	..	55.0	+14 0	..	..	K	1	..	4413m
4	1524	54.8	+14 25	10.3	10.3	A	1	..	4413m	54	1382	55.0	+12 53	8.2	8.3	A2	4	..	36977i
5	..	54.8	+14 9	..	..	K	1	..	4413m	55	1381	55.0	+12 52	7.8	7.9	A3	5	..	36977i
6	1512	54.8	+13 54	10.3	10.9	G	1	..	4413m	56	1494	55.0	- 1 58	9.02	9.02	A0	2	..	20867b
7	1513	54.8	+13 13	10.3	10.3	A	1	..	4413m	57	1680	55.0	- 3 22	9.1	9.4	F0	3	..	20867b
8	1379	54.8	+12 4	8.7	9.1	F5	1	..	36977i	58	..	55.0	- 8 35	..	..	B9	2	..	20895b
9	1537	54.8	+ 4 21	8.9	9.7	G5	2	..	37652i	59	1802	55.0	-11 0	9.6	9.6	B8	2	..	24340b
10	1747	54.8	+ 0 6	8.88	9.66	G5	1	..	20867b	60	1724	55.0	-11 39	9.8	9.8	A0	3	..	24340b
11	1657	54.8	- 8 4	8.6	9.0	F5	6	..	20895b	61	1725	55.0	-11 49	8.5	8.8	F0	7	..	24340b
12	1775	54.8	- 9 21	8.6	8.5	B5	4	..	24340b	62	1729	55.0	-12 51	7.9	7.7	B3	8	5,2	24340b
13	1774	54.8	- 9 35	9.1	9.1	B9	3	..	24340b	63	1692	55.0	-16 56	9.1	9.2	A2	3	..	18975b
14	1714	54.8	-17 31	8.7	9.9	K5	2	..	18975b	64	1641	55.0	-19 55	10.1	9.5	A0	2	..	12631b
15	1657	54.8	-20 39	8.5	7.7	B8	6	..	12631b	65	1685	55.0	-21 14	9.1	8.4	A0	4	..	12631b
16	3872	54.8	-25 12	9.5	9.1	A2	3	..	20582b	66	1686	55.0	-21 27	9.1	9.5	K5	1	..	12631b
17	3870	54.8	-25 57	9.5	9.6	K0	2	..	20582b	67	4685	55.0	-24 44	10.7	9.4	A0	5	..	24433b
18	2532	54.8	-49 21	9.6	9.9	G5	2	..	38414b	68	3758	55.0	-30 29	9.5	9.8	K0	2	..	24433b
19	634	54.8	-64 13	9.1	10.1	K0	1	..	15176b	69	2977	55.0	-39 50	9.0	10.2	K5	1	..	20534b
20	578	54.8	-68 49	8.7	9.7	K0	1	..	15223b	70	2861	55.0	-42 24	9.6	9.3	A5	2	..	20556b
21	284	54.8	-77 58	8.9	9.7	G5	5	..	20652b	71	3046	55.0	-44 28	8.5	9.4	K0	1	..	20556b
22	1100	54.9	+54 11	7.82	8.24	F5	4	..	37526i	72	3047	55.0	-44 29	10.0	9.8	A3	1	..	20556b
23	1549	54.9	+22 9	8.6	9.8	K5	2	..	38238i	73	2792	55.0	-46 37	10.2	9.7	A0	3	..	38414b
24	1469	54.9	+17 7	7.5	7.5	B9	6	..	37441i	74	2793	55.0	-46 43	10.0	9.4	G0	3	..	38414b
25	1417	54.9	+14 58	10.3	11.5	K5	1	..	4413m	75	2614	55.0	-48 15	9.2	10.5	K0	2	..	38414b
26	1749	54.9	+ 0 12	9.6	9.7	A2	2	..	20867b	76	741	55.0	-61 36	8.6	9.7	K2	2	..	15176b
27	1748	54.9	+ 0 4	10.3	10.3	B8	3	..	20867b	77	651	55.0	-63 11	9.2	9.5	F2	4	..	15176b
28	1533	54.9	- 0 18	8.7	9.5	G5	1	..	20867b	78	285	55.0	-77 19	9.6	10.0	F5	5	..	20652b
29	1490	54.9	- 1 52	9.6	10.6	K0	1	..	20867b	79	1272	55.1	+51 34	8.6	9.8	K5	..	..	M
30	1769	54.9	- 4 29	9.1	9.2	A2	4	..	20895b	80	1637	55.1	+43 24	9.5	10.5	K	1	..	37501i
31	1658	54.9	- 8 14	8.3	8.7	F5	7	..	20895b	81	1668	55.1	+20 15	8.8	8.9	A5p	2	R	38238i
32	1722	54.9	-11 56	9.8	10.1	F2	2	..	24340b	82	1527	55.1	+13 58	9.6	9.6	A	4	..	4413m
33	1764	54.9	-13 33	8.3	8.6	F0	6	2,2	24340b	83	1477	55.1	+ 9 31	9.1	9.1	A	2	..	15139b
34	1660	54.9	-21 1	8.5	9.4	Ma	2	..	12631b	84	1499	55.1	+ 2 40	7.8	8.9	K2	2	..	37652i
35	4683	54.9	-24 33	10.4	9.7	A2	2	..	24433b	85	1750	55.1	+ 0 14	8.1	8.4	F0	3	..	37652i
36	4681	54.9	-24 48	9.3	10.1	K2	2	..	24433b	86	1869	55.1	- 2 46	8.9	9.0	A2	6	..	20867b
37	3669	54.9	-26 7	9.5	9.1	A2	4	..	20582b	87	1906	55.1	- 5 21	9.8	9.8	B9	2	..	20895b
38	3670	54.9	-26 20	7.4	7.4	B8	2	5,10	4530b	88	1591	55.1	-15 22	9.2	9.2	A0	2	..	18975b
39	3729	54.9	-29 37	10.7	11.7	K0	2	..	24433b	89	1626	55.1	-18 43	9.1	9.9	G5	1	..	18975b
40	3757	54.9	-30 52	6.38	6.7	B8	4	2,7 R	4659b	90	1633	55.1	-22 41	8.9	8.4	A5	6	..	12631b
41	3538	54.9	-33 2	7.6	9.4	K5	2	..	18926b	91	4698	55.1	-23 52	10.2	9.3	G5	2	..	12631b
42	2481	54.9	-50 52	8.2	9.0	G0	5	..	38414b	92	4687	55.1	-24 10	10.0	10.4	K5	2	..	24433b
43	98	54.9	-84 8	9.6	10.7	K2	3	..	20557b	93	3676	55.1	-26 56	9.5	9.3	A0	2	..	20582b
44	1159	55.0	+55 2	8.51	9.69	K5	..	..	M	94	3240	55.1	-34 53	8.95	9.5	K0	2	..	20534b
45	1101	55.0	+54 19	7.47	8.03	G0	5	..	37526i	95	3272	55.1	-36 42	8.0	8.0	A0	6	..	20534b
46	1384	55.0	+50 26	9.2	9.8	G	1	..	37515i	96	2843	55.1	-45 58	6.80	6.9	A0	3	..	8969b
47	1430	55.0	+29 22	7.70	8.48	G5	3	..	37527i	97	2536	55.1	-49 19	9.8	9.7	F2	3	..	38414b
48	1424	55.0	+26 19	9.1	9.2	A2	2	E	38185i	98	1157	55.1	-54 55	7.72	9.2	K5	3	..	13007b
49	..	55.0	+16 20	..	..	A2	2	..	4413m	99	732	55.1	-59 12	8.5	8.5	A0	4	..	15176b
50	..	55.0	+15 17	..	..	A3	3	..	4413m	100	414	55.1	-75 16	9.7	10.7	K0	1	..	20652b

THE HENRY DRAPER CATALOGUE.

52200

6^h 55^m.2

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1454	55.2	+33 50	7.34	7.42	A3	5	..	37527i	51	1111	55.3	-55 47	8.8	9.5	Ko	1	..	13007b
2	1301	55.2	+27 32	8.2	8.2	Ao	6	E	38185i	52	673	55.3	-65 49	8.5	8.6	A2	4	..	15223b
3	1550	55.2	+22 30	9.5	9.5	A	2	..	38238i	53	285	55.4	+75 12	8.77	9.77	Ko	2	..	37559i
4	..	55.2	+16 54	..	..	F5	1	..	4413m	54	1218	55.4	+46 7	7.7	7.7	Ao	7	..	37501i
5	1514	55.2	+13 52	8.9	8.9	Ao	6	..	4413m	55	1427	55.4	+26 43	8.5	8.5	B9	4	E	38185i
6	1502	55.2	+ 2 4	6.60	6.55	B8	8	..	37652i	56	1420	55.4	+15 37	10.3	10.7	F5	1	..	4413m
7	1870	55.2	- 2 42	8.9	9.9	Ko	3	..	20867b	57	..	55.4	+13 44	..	..	A	1	..	4413m
8	1908	55.2	- 5 14	9.6	9.6	Ao	4	..	20895b	58	1604	55.4	+ 8 41	9.1	9.2	A2	3	..	15139b
9	1907	55.2	- 6 3	8.7	9.0	F2	5	..	20895b	59	1505	55.4	+ 2 34	9.3	9.3	A	3	..	39867b
10	1867	55.2	- 7 1	9.1	9.2	A2	3	..	20895b	60	1506	55.4	+ 2 30	8.5	9.1	Go	3	..	39867b
11	1777	55.2	- 9 37	9.4	9.5	A5	1	..	24340b	61	1754	55.4	+ 0 15	9.1	9.1	B8	3	..	20867b
12	1804	55.2	-10 9	8.86	8.81	B8	3	..	24340b	62	1536	55.4	- 0 23	8.9	9.5	Go	2	..	37700i
13	1674	55.2	-14 23	9.1	9.2	A3	3	..	18975b	63	1873	55.4	- 2 17	8.1	9.1	Ko	8	..	20867b
14	1642	55.2	-19 24	9.0	8.6	B8	5	..	12631b	64	1874	55.4	- 2 52	9.2	9.2	B9	5	..	20867b
15	3880	55.2	-25 14	9.5	10.1	Ko	1	..	24433b	65	1910	55.4	- 5 14	6.37	6.87	F8	7	..	38609i
16	3679	55.2	-26 28	9.2	9.3	Ao	3	..	24433b	66	1912	55.4	- 5 40	6.97	6.78	B2	4	..	38609i
17	3680	55.2	-27 0	9.7	9.9	Go	1	..	24433b	67	1869	55.4	- 6 34	8.9	8.9	Ao	4	..	20895b
18	3482	55.2	-27 44	9.5	9.8	K2	1	..	24433b	68	1870	55.4	- 7 1	9.0	9.3	Fo	3	..	20895b
19	3674	55.2	-28 49	7.9	7.7	Fo	8	..	20582b	69	1660	55.4	- 8 32	9.1	9.9	G5	3	..	20895b
20	3545	55.2	-32 35	6.91	8.0	G5	7	..	18926b	70	1780	55.4	- 9 9	8.5	8.5	Ao	3	..	24340b
21	2815	55.2	-40 18	9.0	9.3	A2	3	..	20534b	71	1728	55.4	-11 52	8.7	8.7	B9	8	..	24340b
22	2795	55.2	-46 59	10.2	10.5	G5	1	..	38414b	72	1731	55.4	-12 29	9.4	9.4	Ao	2	..	24340b
23	2710	55.2	-47 59	8.2	8.6	A5	6	..	38414b	73	1689	55.4	-21 28	6.25	5.6	B8	10	..	12631b
24	500	55.2	-71 28	9.4	10.6	K5	1	..	15168b	74	1639	55.4	-22 58	8.3	8.9	K2	5	..	12631b
25	..	55.3	+68 19	..	..	Pec.	..	R	M	75	3689	55.4	-26 32	9.5	9.5	G5	2	..	24433b
26	1638	55.3	+43 18	9.7	9.8	A2	1	..	37501i	76	3486	55.4	-27 50	11.4	9.8	Ao	1	..	24433b
27	1639	55.3	+42 0	8.1	9.1	Ko	1	..	37501i	77	2833	55.4	-43 3	9.8	9.7	F5	1	..	20556b
28	1512	55.3	+34 31	10.0	10.3	F2	2	..	37447i	78	2616	55.4	-48 8	9.4	9.6	F2	4	..	38414b
29	1433	55.3	+29 32	9.1	9.1	Ao	1	..	37478i	79	2615	55.4	-49 1	7.5	7.3	Ao	5	1,8	9026b
30	1576	55.3	+19 22	7.7	8.7	Ko	3	..	37441i	80	637	55.4	-64 52	9.5	9.5	Ao	2	..	15223b
31	..	55.3	+16 47	..	..	G5	1	..	4413m	81	1575	55.5	+41 48	8.0	8.5	F8	5	..	37501i
32	..	55.3	+15 14	..	..	F2	2	..	4413m	82	1461	55.5	+32 5	8.4	8.5	A5	4	..	37527i
33	..	55.3	+14 38	..	..	Ko	1	..	4413m	83	1357	55.5	+16 15	7.8	8.8	Ko	8	0,2	4413m
34	1528	55.3	+14 20	9.3	9.3	Ao	4	..	4413m	84	..	55.5	+16 4	..	..	K2	1	..	4413m
35	1529	55.3	+14 14	9.1	9.2	A2	5	0,1	4413m	85	1421	55.5	+15 49	9.3	10.1	G5	4	..	4413m
36	..	55.3	+13 35	..	..	K	1	..	4413m	86	1530	55.5	+14 33	9.6	10.6	Ko	1	..	4413m
37	1384	55.3	+12 33	7.7	8.7	Ko	3	..	36977i	87	1370	55.5	+10 46	6.98	8.16	K5	2	..	36977i
38	1752	55.3	+ 0 2	9.3	10.3	Ko	1	..	20867b	88	1638	55.5	+ 1 0	9.3	9.4	A2	1	..	20867b
39	1495	55.3	- 1 26	9.1	9.2	A5	3	..	20867b	89	1876	55.5	- 2 50	9.6	9.7	A3	4	..	20867b
40	1772	55.3	- 4 28	8.9	10.0	K2	4	..	20895b	90	1877	55.5	- 2 54	9.2	9.2	Ao	5	..	20867b
41	1659	55.3	- 8 39	9.1	9.4	Fo	5	..	20895b	91	1729	55.5	-11 39	9.6	9.6	Ao	3	..	24340b
42	1675	55.3	-14 52	7.9	8.2	F2	3	..	8909b	92	1698	55.5	-16 31	9.2	10.3	K2	1	..	18975b
43	1594	55.3	-15 7	8.91	9.33	F5	4	..	18975b	93	3692	55.5	-26 39	9.2	9.8	K2	1	..	24433b
44	1694	55.3	-16 3	9.0	8.9	B5	3	R	18975b	94	3488	55.5	-27 55	11.2	9.8	A2	2	..	24433b
45	1688	55.3	-21 46	10.5	9.7	A5	2	R	12631b	95	3397	55.5	-33 44	9.4	9.2	F5	4	..	20670b
46	3685	55.3	-26 57	9.3	10.1	K2	1	..	24433b	96	3212	55.5	-37 37	8.7	8.3	F8	6	..	20534b
47	2708	55.3	-41 50	8.4	8.4	A3	5	..	20556b	97	2986	55.5	-39 51	9.4	8.8	Ao	5	..	20534b
48	2711	55.3	-47 18	9.6	9.1	A2	6	..	38414b	98	1042	55.5	-52 30	7.2	7.8	F5	7	..	10697b
49	2542	55.3	-49 28	10.9	10.8	A	1	..	38414b	99	1205	55.5	-53 28	8.2	8.7	F5	5	..	13007b
50	1158	55.3	-54 9	9.0	9.5	Go	3	..	13007b	100	1112	55.5	-55 32	7.7	7.5	B9	10	..	13007b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

52300

6^h 55^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1113	55.5	-55 58	7.7	8.3	G5	6	..	13007b	51	1644	55.8	-22 53	8.5	8.6	Ko	7	..	12631b
2	672	55.5	-69 54	8.0	9.2	K5	3	..	15168b	52	4706	55.8	-24 33	9.5	8.9	Ao	3	..	12631b
3	1642	55.6	+42 42	8.6	9.8	K5	1	..	37501i	53	4705	55.8	-24 54	10.9	9.5	Ao	2	..	24433b
4	1434	55.6	+29 48	8.71	8.77	A2	3	2,2	37527i	54	3892	55.8	-25 56	9.0	8.6	A2	4	..	20582b
5	1540	55.6	+25 43	8.4	8.4	Ao	3	..	38185i	55	3495	55.8	-27 10	9.5	9.2	F5	3	..	20582b
6	1424	55.6	+15 38	8.8	8.8	Ao	7	..	4413m	56	3689	55.8	-28 16	6.92	7.5	B5	4	..	4530b
7	1423	55.6	+15 23	8.3	9.3	Ko	6	..	4413m	57	3690	55.8	-28 47	9.5	9.6	Go	2	..	20582b
8	1515	55.6	+13 54	10.3	10.3	A	1	..	4413m	58	3249	55.8	-34 12	10.0	9.8	F5	3	..	20670b
9	1408	55.6	+11 55	6.76	6.82	A2	7	..	36977i	59	3070	55.8	-38 42	8.7	8.4	B8	7	..	20534b
10	1878	55.6	-2 39	10.5	10.5	B9	2	..	20867b	60	2821	55.8	-40 19	9.3	10.2	K2	1	..	20534b
11	1913	55.6	-5 20	9.1	10.3	K5	1	..	20895b	61	2842	55.8	-43 57	9.4	9.4	Go	2	..	20556b
12	1662	55.6	-8 16	5.84	5.84	Ao	7	..	38609i	62	2850	55.8	-45 38	6.22	6.6	Ao	4	..	8969b
13	1663	55.6	-9 2	9.6	9.6	A	1	..	24340b	63	2489	55.8	-50 3	8.28	8.4	Ao	7	..	38414b
14	1730	55.6	-11 35	9.4	9.4	Ao	3	..	24340b	64	677	55.8	-67 16	9.9	9.9	Ao	2	..	15223b
15	1701	55.6	-16 10	8.1	8.2	A3	6	..	18975b	65	286	55.8	-77 33	7.6	7.7	A2	9	..	20652b
16	3886	55.6	-25 34	10.0	9.8	G5	1	..	24433b	66	1572	55.9	+44 36	8.6	9.6	Ko	2	..	37501i
17	3489	55.6	-27 45	7.7	7.7	A2	8	..	20582b	67	1639	55.9	+37 31	8.6	9.6	Ko	2	..	37447i
18	3215	55.6	-37 17	10.0	9.8	F8	1	..	20534b	68	1471	55.9	+31 23	8.0	8.6	Go	3	..	37527i
19	3216	55.6	-37 48	10.4	10.1	F5	2	..	20534b	69	1498	55.9	+24 30	8.0	8.0	Ao	3	..	38238i
20	3063	55.6	-38 30	10.9	10.1	A2	1	..	20534b	70	1553	55.9	+22 12	7.7	8.1	F5	3	E	37441i
21	2618	55.6	-48 32	10.2	10.5	Go	1	..	38414b	71	1671	55.9	+20 12	8.0	8.0	Ao	4	E	37441i
22	420	55.6	-74 57	9.9	10.5	Go	1	..	20652b	72	1451	55.9	+18 8	7.33	7.39	A2	5	..	37441i
23	473	55.7	+67 30	9.2	9.2	Ao	2	..	38155i	73	1532	55.9	+14 29	10.3	10.9	Go	1	..	4413m
24	1552	55.7	+22 45	10.2	10.2	A	2	..	38238i	74	1519	55.9	+13 54	9.3	9.7	F5	2	..	4413m
25	1358	55.7	+16 13	10.3	11.4	K2	2	..	4413m	75	1518	55.9	+13 18	9.3	10.4	K2	1	..	4413m
26	1372	55.7	+10 23	8.8	9.2	F5	2	..	15139b	76	1373	55.9	+10 18	9.3	9.3	Ao	3	..	15139b
27	1554	55.7	+7 33	9.1	9.2	A2	3	..	15139b	77	1508	55.9	+3 12	8.8	8.8	B8	3	..	37652i
28	1479	55.7	+6 46	8.7	8.8	A5	3	..	15139b	78	1757	55.9	+0 48	8.89	9.89	Ko	1	..	20867b
29	1664	55.7	-8 43	8.9	8.9	B8	6	..	20895b	79	1542	55.9	-0 31	8.1	8.2	A2	7	..	37700i
30	1770	55.7	-13 27	8.5	8.5	Ao	6	..	24340b	80	1775	55.9	-4 22	9.2	9.2	Ao	4	..	44407b
31	4714	55.7	-23 50	10.2	9.2	Ao	2	..	12631b	81	1774	55.9	-4 48	9.1	9.1	Ao	3	..	44407b
32	3280	55.7	-36 41	7.6	8.6	F2	5	..	20534b	82	1667	55.9	-9 4	6.36	6.12	Bo	4	0,7 R	10638b
33	2620	55.7	-48 21	9.8	10.2	Go	2	..	38414b	83	1783	55.9	-9 21	8.3	9.5	K5	2	..	24340b
34	1173	55.8	+56 35	8.6	9.2	G	4	R	37526i	84	1784	55.9	-9 29	8.9	8.9	B9	4	..	24340b
35	1359	55.8	+16 35	10.3	11.4	K2	1	..	4413m	85	1735	55.9	-11 6	9.4	10.4	Ko	1	..	24340b
36	1425	55.8	+15 50	8.9	8.9	Ao	8	..	4413m	86	1734	55.9	-11 19	10.5	10.5	A	1	..	24340b
37	1517	55.8	+13 20	10.3	10.6	F2	2	..	4413m	87	1679	55.9	-14 50	9.4	9.4	Ao	1	R	46170b
38	1546	55.8	+4 49	8.70	9.20	F8	2	..	37652i	88	1645	55.9	-19 40	6.90	8.1	Ko	5	..	12631b
39	1504	55.8	+3 33	9.1	9.1	Ao	2	..	37652i	89	1694	55.9	-21 8	9.6	9.0	B9	2	..	12631b
40	1509	55.8	+2 16	8.3	8.6	F2	4	..	37652i	90	1645	55.9	-22 35	9.1	9.0	Ko	1	..	12631b
41	1510	55.8	+2 0	8.4	9.4	Ko	2	..	37652i	91	4717	55.9	-23 45	9.7	8.4	Ao	6	..	12631b
42	1879	55.8	-2 28	9.8	10.8	Ko	1	..	20867b	92	4707	55.9	-24 26	10.0	9.0	A5	2	..	12631b
43	1872	55.8	-6 17	8.1	8.4	Fo	7	0,5-	20895b	93	3698	55.9	-26 19	9.2	9.2	G5	4	..	24433b
44	1810	55.8	-10 52	10.1	10.1	Ao	2	..	24340b	94	3496	55.9	-27 31	9.0	9.2	Go	1	..	20582b
45	1733	55.8	-12 38	9.1	10.1	Ko	3	..	24340b	95	3740	55.9	-29 34	7.5	8.0	F5	8	..	20582b
46	1771	55.8	-13 40	9.1	9.1	B9	4	..	24340b	96	3221	55.9	-37 13	10.0	10.6	G5	1	..	20534b
47	1597	55.8	-15 7	8.06	8.06	Ao	3	..	8909b	97	3220	55.9	-37 55	10.2	10.7	Ko	1	..	20534b
48	1644	55.8	-20 1	6.10	5.9	B8	6	0,10	8902b	98	1206	55.9	-53 46	9.4	9.5	A5	3	..	13007b
49	1693	55.8	-21 41	9.4	8.9	B9	4	..	12631b	99	638	55.9	-64 26	9.1	9.5	F5	2	..	15223b
50	1642	55.8	-22 35	8.7	8.3	Ao	6	..	12631b	100	427	55.9	-77 0	9.8	9.9	A2	5	..	20652b

THE HENRY DRAPER CATALOGUE.

52400

6^h 56^m.0

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1585	56.0	+49 17	8.5	9.3	G5	2	..	37515i	51	1473	56.2	+31 31	7.8	9.0	K5	2	..	37527i
2	1573	56.0	+44 54	8.62	9.62	Ko	2	..	37501i	52	1435	56.2	+26 1	8.0	8.8	G5	2	..	37478i
3	1542	56.0	+25 35	6.94	7.00	A2	7	..	38185i	53	1361	56.2	+16 42	10.3	10.3	A	4	..	4413m
4	1574	56.0	+23 50	9.1	9.1	Ao	1	..	38238i	54	1428	56.2	+15 32	9.9	11.3	Ma	1	..	4413m
5	..	56.0	+16 31	..	..	Go	2	..	4413m	55	1481	56.2	+ 9 51	8.27	9.27	Ko	3	..	15139b
6	1374	56.0	+ 9 59	9.3	9.4	A2	2	..	15139b	56	1558	56.2	+ 7 5	8.1	8.9	G5	2	..	37652i
7	1608	56.0	+ 8 47	8.3	8.4	A5	6	..	15139b	57	1483	56.2	+ 6 38	8.3	8.3	Ao	3	..	37652i
8	1758	56.0	+ 0 42	8.1	8.1	Ao	5	..	37652i	58	1547	56.2	- 0 53	8.9	8.9	B9	2	..	37700i
9	1545	56.0	- 0 16	8.7	9.8	K2	1	..	20867b	59	1882	56.2	- 2 12	10.1	10.1	Ao	2	..	20867b
10	1874	56.0	- 6 47	9.1	9.2	A2	3	..	20895b	60	1779	56.2	- 4 57	8.60	9.60	Ko	2	..	44407b
11	1875	56.0	- 6 52	9.1	10.3	K5	1	..	20895b	61	1878	56.2	- 6 5	9.4	9.5	A2	2	..	20895b
12	1736	56.0	-11 24	10.6	10.6	A	1	..	24340b	62	1647	56.2	-22 31	7.9	8.6	K5	4	..	12631b
13	1646	56.0	-19 54	8.9	8.9	Go	2	..	12631b	63	3504	56.2	-27 40	8.7	8.3	B2	7	..	20582b
14	3402	56.0	-33 20	6.58	7.5	A3	..	2,6	56,123	64	3748	56.2	-29 39	11.2	10.1	Ao	2	..	24433b
15	2992	56.0	-39 28	8.4	9.0	G5	4	..	20534b	65	3749	56.2	-29 56	7.14	8.3	K2	7	..	20582b
16	2806	56.0	-46 11	9.8	10.5	Ko	2	..	38414b	66	2827	56.2	-40 16	10.4	9.6	Ao	2	..	20534b
17	2721	56.0	-47 51	10.5	10.3	Ao	2	..	38414b	67	2870	56.2	-42 6	8.0	8.4	B8	5	..	20556b
18	579	56.0	-68 22	7.2	8.2	Ko	8	..	15223b	68	2812	56.2	-46 3	8.5	9.1	Ko	5	..	38414b
19	384	56.1	+71 23	9.9	9.9	A	1	..	37559i	69	2809	56.2	-46 25	10.5	9.4	Ao	3	..	38414b
20	1472	56.1	+48 3	8.0	8.0	Ao	5	..	37438i	70	2811	56.2	-46 53	7.35	7.6	B9	10	..	38414b
21	1404	56.1	+30 0	8.56	9.63	K2	1	..	37478i	71	1474	56.3	+31 43	8.0	9.0	Ko	2	..	37527i
22	1471	56.1	+21 57	8.0	8.0	B9	5	..	38238i	72	1545	56.3	+25 30	7.41	7.49	A3	5	..	38185i
23	..	56.1	+19 31	..	..	Mb	..	..	M	73	1558	56.3	+22 15	7.28	8.06	G5	3	..	37441i
24	..	56.1	+17 5	..	..	A2	3	..	4413m	74	1472	56.3	+20 59	7.9	8.0	A2	4	..	37441i
25	..	56.1	+15 18	..	..	G5	1	..	4413m	75	..	56.3	+16 26	..	..	A	3	..	4413m
26	1427	56.1	+14 59	8.34	9.34	Ko	5	0,1	4413m	76	1522	56.3	+13 47	10.3	10.3	A	3	..	4413m
27	1520	56.1	+13 20	9.1	9.9	G5	4	..	4413m	77	1521	56.3	+13 33	10.3	11.3	Ko	1	..	4413m
28	1390	56.1	+12 30	9.6	9.7	A2	1	..	36977i	78	1612	56.3	+ 8 35	8.7	8.8	A2	4	..	15139b
29	1551	56.1	+ 4 47	8.60	8.88	Fo	2	..	37652i	79	1513	56.3	+ 4 58	6.50	6.50	Ao	8	..	37652i
30	1511	56.1	+ 2 42	8.5	8.5	Ao	4	..	37652i	80	1883	56.3	- 2 37	9.2	9.2	B9	5	..	20867b
31	1760	56.1	+ 0 10	8.3	8.7	F5	3	..	37652i	81	1669	56.3	- 8 21	9.2	9.2	Ao	3	..	20895b
32	1685	56.1	- 3 6	7.5	..	R5	4	0,4	44401i	82	1602	56.3	-15 11	8.25	8.31	A2	3	..	8909b
33	1686	56.1	- 3 50	8.5	8.5	B9	3	..	38609i	83	1633	56.3	-18 10	8.6	9.8	K5	2	..	18975b
34	1668	56.1	- 8 27	9.6	9.7	A3	3	..	20895b	84	1648	56.3	-19 47	9.1	8.6	B8	3	..	12631b
35	1736	56.1	-13 1	8.7	9.5	G5	5	..	24340b	85	1670	56.3	-20 30	6.62	6.6	A3	4	0,9	8902b
36	1599	56.1	-15 16	7.20	8.38	K5	4	..	18975b	86	1671	56.3	-20 32	8.1	8.4	Ko	4	..	12631b
37	1695	56.1	-21 59	6.33	6.2	B5	5	3,10	8902b	87	3705	56.3	-26 24	8.0	8.3	Ao	7	..	20582b
38	1646	56.1	-22 56	10.1	9.3	Ao	2	..	12631b	88	3703	56.3	-28 28	8.7	8.4	Ao	5	..	20582b
39	4710	56.1	-24 9	10.2	8.9	Ao	3	..	12631b	89	3774	56.3	-30 22	10.4	9.9	K5	1	..	24433b
40	4711	56.1	-24 56	10.9	9.8	A2	1	..	24433b	90	3773	56.3	-30 28	9.0	9.2	Ao	3	..	24433b
41	3499	56.1	-27 3	9.5	9.2	G5	2	..	20582b	91	3888	56.3	-31 6	8.3	8.9	Go	3	..	18926b
42	3699	56.1	-28 2	9.5	8.7	F2	4	..	20582b	92	2855	56.3	-45 5	7.94	8.2	K5	4	..	20588b
43	3697	56.1	-28 16	10.2	9.5	A2	2	..	24433b	93	581	56.3	-70 21	7.22	6.6	A2	4	..	9003b
44	3747	56.1	-29 38	10.7	10.7	Go	1	..	24433b	94	201	56.3	-80 57	7.35	9.5	K5	5	..	20557b
45	3744	56.1	-29 57	9.00	8.3	B9	6	..	20582b	95	684	56.4	+63 36	8.5	9.5	Ko	2	..	37545i
46	2723	56.1	-47 11	11.5	10.3	A2	2	..	38414b	96	1386	56.4	+47 25	7.62	8.12	F8	4	..	37438i
47	730	56.1	-60 43	8.0	8.8	G5	3	..	18486b	97	1502	56.4	+24 21	5.21	6.21	Ko	9	R	38238i
48	413	56.1	-73 38	9.6	9.9	F2	3	..	20652b	98	1362	56.4	+16 19	8.9	9.7	G5	6	..	4413m
49	421	56.1	-74 36	7.8	8.2	F5	9	..	20652b	99	1430	56.4	+15 55	10.3	11.3	Ko	2	..	4413m
50	1276	56.2	+51 26	7.7	8.7	Ko	4	..	37515i	100	1429	56.4	+15 54	9.9	10.3	F5	3	..	4413m

ANNALS OF HARVARD COLLEGE OBSERVATORY.

52500

6^h 56^m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1533	56.4	+14 53	9.9	10.9	Ko	1	..	4413m	51	1159	56.6	+52 3	9.2	9.6	F5	1	..	37515i
2	1613	56.4	+ 8 14	8.4	8.4	Ao	5	..	15139b	52	1388	56.6	+47 13	7.04	7.46	F5	7	..	37438i
3	1514	56.4	+ 2 41	8.8	8.9	A3	2	..	37652i	53	1580	56.6	+41 48	9.2	9.2	Ao	2	..	37501i
4	1884	56.4	- 3 0	9.6	9.6	B8	3	..	20867b	54	1479	56.6	+17 53	6.20	7.55	Ma	5	E	37441i
5	1690	56.4	- 4 3	9.4	9.4	Ao	2	..	44407b	55	..	56.6	+16 52	..	..	A2	3	..	4413m
6	1670	56.4	- 8 9	8.7	8.7	B8	7	2,2	20895b	56	1431	56.6	+15 28	5.89	6.89	Ko	7	5,10	37441i
7	1811	56.4	-10 19	10.1	10.1	A	1	..	24340b	57	1414	56.6	+11 12	8.3	8.7	F5	1	..	36977i
8	1738	56.4	-11 35	9.2	9.2	Ao	4	..	24340b	58	1614	56.6	+ 8 40	8.5	9.1	Go	2	..	15139b
9	1648	56.4	-22 59	9.4	8.9	B9	3	..	12631b	59	1514	56.6	+ 5 42	6.46	6.29	B3	8	..	37652i
10	4733	56.4	-23 15	9.2	9.7	Ko	1	..	12631b	60	1645	56.6	+ 1 15	9.1	9.2	A2	1	..	20867b
11	4732	56.4	-23 43	10.0	8.6	B8	5	..	12631b	61	1553	56.6	- 0 40	9.1	9.1	B9	3	..	20867b
12	4715	56.4	-24 9	9.2	9.2	G5	2	..	12631b	62	1691	56.6	- 3 4	9.6	10.4	G5	1	..	20867b
13	4716	56.4	-24 29	9.0	8.3	B9	5	..	12631b	63	1923	56.6	- 5 7	8.65	9.65	Ko	3	..	44407b
14	3510	56.4	-27 37	8.9	8.6	A5	7	..	20582b	64	1885	56.6	- 6 48	8.7	9.9	K5	3	3,1	20895b
15	3753	56.4	-29 39	9.5	9.5	A2	3	..	24433b	65	1814	56.6	-10 9	9.51	9.51	Ao	2	..	24340b
16	3775	56.4	-31 0	6.65	7.1	F5	8	..	18926b	66	1651	56.6	-22 15	8.4	8.6	G5	5	..	12631b
17	3890	56.4	-31 29	8.7	8.9	Go	2	..	18926b	67	4741	56.6	-23 27	10.2	8.4	B8	4	..	12631b
18	3894	56.4	-31 37	8.7	9.8	Ko	1	..	18926b	68	3903	56.6	-25 8	9.5	9.3	B9	3	..	24433b
19	3079	56.4	-38 41	9.6	9.1	F5	4	..	20534b	69	3901	56.6	-25 51	9.0	8.4	B9	5	..	20582b
20	2717	56.4	-41 26	8.7	9.0	A5	4	..	20556b	70	3515	56.6	-27 28	11.2	9.8	Ao	1	..	24433b
21	2727	56.4	-47 19	9.6	9.4	F2	4	..	38414b	71	3516	56.6	-27 55	11.8	9.7	Ao	2	..	24433b
22	65	56.4	-88 52	8.4	8.5	A2	3	..	22566b	72	3709	56.6	-28 51	9.7	9.2	Ao	3	..	20582b
23	1647	56.5	+42 23	9.2	9.2	Ao	3	..	37501i	73	3408	56.6	-33 31	10.0	9.8	Ko	2	..	20670b
24	1781	56.5	+40 21	8.5	8.5	Ao	1	E	37501i	74	2831	56.6	-40 52	7.0	8.2	Ko	6	..	20671b
25	1586	56.5	+19 22	8.7	8.7	Ao	3	..	38238i	75	2879	56.6	-42 7	8.5	10.1	Ma	1	..	20556b
26	1478	56.5	+17 46	8.9	8.9	Ao	2	E	37441i	76	3061	56.6	-44 8	9.4	9.7	G5	1	..	20556b
27	1477	56.5	+17 5	9.1	9.6	F8	5	..	4413m	77	2498	56.6	-50 11	8.84	9.6	F2	3	..	38414b
28	..	56.5	+16 40	..	..	K2	1	..	4413m	78	2201	56.6	-51 33	9.2	9.7	Go	4	..	38414b
29	..	56.5	+15 24	..	..	Go	2	..	4413m	79	1210	56.6	-56 38	8.7	9.2	Ao	3	..	13007b
30	1534	56.5	+13 58	8.4	9.5	K2	3	..	4413m	80	1640	56.7	+37 47	9.1	9.2	A5	7	..	37447i
31	1523	56.5	+13 36	9.6	10.6	Ko	2	..	4413m	81	1588	56.7	+19 26	8.9	9.0	A2	2	..	38238i
32	1549	56.5	- 0 41	9.6	9.6	B9	2	..	20867b	82	..	56.7	+16 19	..	..	Go	2	..	4413m
33	1885	56.5	- 2 59	7.9	7.7	B3	8	..	20867b	83	1535	56.7	+14 48	8.64	9.14	F8	5	..	4413m
34	1921	56.5	- 6 1	8.3	8.3	Ao	6	0,2	20895b	84	..	56.7	+14 44	..	..	F	1	..	4413m
35	1687	56.5	- 7 35	8.5	8.5	B9	8	1,1	20895b	85	..	56.7	+14 24	..	..	G5	1	..	4413m
36	1672	56.5	- 8 4	8.0	8.0	B8	8	2,2	20895b	86	1395	56.7	+12 43	7.7	7.8	A2	6	..	36977i
37	1790	56.5	- 9 20	9.1	9.4	Fo	3	..	24340b	87	1766	56.7	+ 0 2	8.43	8.43	Ao	6	..	20867b
38	1738	56.5	-12 36	9.8	9.8	A	1	..	24340b	88	1554	56.7	- 0 14	8.8	8.8	B9	4	..	20867b
39	1705	56.5	-16 19	8.9	8.9	Ao	3	..	18975b	89	1887	56.7	- 6 11	8.1	8.1	B8	8	2,3	20895b
40	1649	56.5	-19 18	6.93	7.1	Ao	4	0,8	8902b	90	1796	56.7	- 9 34	7.9	8.2	F2	6	..	24340b
41	3709	56.5	-26 51	10.9	9.7	A3	2	..	24433b	91	1742	56.7	-11 6	9.2	10.2	Ko	3	..	24340b
42	3512	56.5	-27 41	10.4	9.3	Ao	3	..	24433b	92	1606	56.7	-15 33	9.6	9.7	A2	3	..	18975b
43	3513	56.5	-27 54	9.0	9.2	Ko	2	..	20582b	93	1729	56.7	-17 16	8.9	10.1	K5	1	..	46170b
44	3756	56.5	-29 4	10.7	10.1	Ao	2	..	24433b	94	4742	56.7	-23 34	10.4	8.9	B8	3	..	12631b
45	3755	56.5	-29 16	9.0	9.2	G5	2	..	20582b	95	4720	56.7	-24 20	7.49	7.8	A3	8	..	12631b
46	3758	56.5	-30 1	9.65	9.0	A5	4	..	24433b	96	3906	56.7	-25 30	7.27	7.7	B3	8	..	20582b
47	3778	56.5	-30 32	7.5	8.9	Ko	3	..	20582b	97	3907	56.7	-25 57	7.7	7.8	B8	7	..	20582b
48	3777	56.5	-30 56	7.5	9.5	K5	2	..	18926b	98	3711	56.7	-26 24	10.9	9.7	Fo	2	..	24433b
49	2999	56.5	-39 24	9.8	10.5	Ko	1	..	20534b	99	3712	56.7	-27 0	8.7	8.3	A5	6	..	20582b
50	580	56.5	-68 53	8.8	9.2	F5	3	..	15223b	100	3710	56.7	-28 4	10.9	10.2	K	1	..	24433b

THE HENRY DRAPER CATALOGUE.

52600

6^h 56^m.7

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3759	56.7	-29 7	10.9	9.8	Ao	3	..	24433b	51	616	57.0	+64 35	8.2	8.6	F5	5	..	37545i
2	3410	56.7	-33 44	8.7	8.3	A2	2	..	7406b	52	686	57.0	+62 59	8.1	9.1	Ko	3	..	37545i
3	1116	56.7	-55 35	6.11	7.5	Ko	9	..	13007b	53	1160	57.0	+52 54	9.2	9.5	Fo	2	..	37515i
4	1090	56.7	-57 48	8.9	9.5	F5	2	..	13007b	54	1783	57.0	+40 44	7.01	8.01	Ko	7	E	37501i
5	743	56.7	-62 56	9.2	9.8	G	1	..	15176b	55	1515	57.0	+34 22	9.0	9.6	Go	3	..	37447i
6	286	56.8	+74 59	8.87	9.65	G5	2	..	37559i	56	1367	57.0	+16 8	9.9	10.5	G	1	..	4413m
7	1383	56.8	+45 13	7.62	7.90	Fo	7	..	37501i	57	1368	57.0	+16 5	10.3	10.6	Fo	3	..	4413m
8	1459	56.8	+33 26	8.5	9.0	F8	3	..	37527i	58	..	57.0	+15 18	..	..	G	1	..	4413m
9	1363	56.8	+16 49	6.01	7.19	K5	6	E	37441i	59	1491	57.0	+ 9 20	8.9	9.9	Ko	3	..	15139b
10	1556	56.8	- 1 0	8.9	9.5	Go	3	..	37700i	60	1617	57.0	+ 8 41	8.3	8.8	F8	4	..	15139b
11	1509	56.8	- 1 12	6.18	7.18	Ko	8	..	37700i	61	1565	57.0	+ 7 10	8.5	8.5	Ao	3	..	37652i
12	1635	56.8	-18 17	9.8	9.9	A2	2	..	18975b	62	1514	57.0	+ 3 12	8.9	9.9	Ko	2	..	37652i
13	1701	56.8	-21 50	8.0	8.1	F8	5	..	12631b	63	1520	57.0	+ 2 4	8.9	9.7	G5	2	..	37700i
14	1653	56.8	-22 24	9.1	8.7	B8	4	..	12631b	64	1767	57.0	+ 0 5	9.6	10.0	F5	1	..	20867b
15	3713	56.8	-26 23	10.2	9.2	A2	3	..	24433b	65	1780	57.0	- 4 23	9.8	9.8	Ao	1	..	44407b
16	3714	56.8	-26 49	8.9	8.3	B9	6	..	20582b	66	1926	57.0	- 5 35	5.38	6.56	K5	7	0,10	38609i
17	3520	56.8	-27 38	8.0	8.9	K2	5	..	20582b	67	1889	57.0	- 6 54	8.7	8.7	B8	6	2,2	20895b
18	3518	56.8	-27 48	9.2	8.6	B9	5	..	20582b	68	1777	57.0	-13 19	8.9	8.9	Ao	4	..	24340b
19	3711	56.8	-28 21	6.38	7.4	F8	..	3,10	28,198	69	1687	57.0	-14 55	8.76	8.76	Ao	3	..	18975b
20	3002	56.8	-39 40	7.6	8.2	B9	7	..	20534b	70	3911	57.0	-25 4	5.80	5.7	B3	..	2,9	28,199
21	2633	56.8	-48 27	9.6	11.3	Ko	1	..	38414b	71	3718	57.0	-26 49	8.9	8.4	Ao	5	..	20582b
22	1211	56.8	-56 15	6.42	7.2	F2	10	..	13007b	72	3786	57.0	-30 58	8.7	8.9	F8	2	..	18926b
23	1091	56.8	-57 57	8.8	9.2	Ao	4	..	13007b	73	3262	57.0	-34 46	9.0	10.1	Ko	1	..	20534b
24	731	56.8	-60 9	8.36	8.8	Go	3	..	18486b	74	3271	57.0	-35 22	10.7	11.1	A5	2	..	20534b
25	749	56.8	-61 23	9.0	9.5	F8	3	..	15176b	75	2882	57.0	-42 45	8.5	9.0	Ko	2	..	20556b
26	678	56.8	-67 6	8.8	9.6	G5	2	..	15223b	76	1213	57.0	-56 20	9.4	9.8	F5	2	..	13007b
27	242	56.8	-78 57	9.6	10.6	Ko	3	..	20652b	77	160	57.0	-82 4	8.2	9.0	G5	4	..	20557b
28	1164	56.9	+55 52	7.94	8.00	A2	6	..	37526i	78	1047	57.1	+59 25	9.4	10.2	G5	1	..	37526i
29	1586	56.9	+49 35	9.2	9.2	A	1	..	37515i	79	1551	57.1	+25 27	8.4	8.5	A2	1	E	37478i
30	1648	56.9	+42 23	8.9	9.2	Fo	3	..	37501i	80	..	57.1	+17 4	..	..	Go	1	..	4413m
31	1641	56.9	+37 48	9.8	9.8	Ao	3	..	37447i	81	..	57.1	+16 53	..	..	G5	1	..	4413m
32	1642	56.9	+37 29	8.6	8.6	Ao	6	..	37447i	82	1433	57.1	+14 58	9.6	9.6	Ao	3	..	4413m
33	1643	56.9	+36 56	8.8	9.3	F8	4	..	37447i	83	1537	57.1	+14 12	10.3	11.3	Ko	1	..	4413m
34	1365	56.9	+16 7	8.7	9.2	F8	7	2,2	4413m	84	1528	57.1	+13 29	9.6	10.0	F5	2	..	4413m
35	1432	56.9	+15 16	10.3	10.9	Go	2	..	4413m	85	1619	57.1	+ 8 49	7.9	8.5	Go	4	..	37652i
36	1536	56.9	+14 40	9.9	10.9	Ko	1	..	4413m	86	..	57.1	+ 8 40	..	..	Ao	2	..	15139b
37	1527	56.9	+13 55	8.3	8.3	Ao	4	..	36977i	87	1620	57.1	+ 7 57	9.6	10.2	Go	1	..	15139b
38	1490	56.9	+ 9 49	9.6	10.2	Go	2	..	15139b	88	1515	57.1	+ 5 40	8.7	9.3	Go	2	..	15139b
39	1618	56.9	+ 8 16	8.1	8.1	Ao	3	..	37652i	89	1768	57.1	+ 0 35	8.7	9.1	F5	2	..	37652i
40	1801	56.9	- 9 53	9.2	9.8	Go	1	..	24340b	90	1694	57.1	- 3 37	6.79	7.79	Ko	3	..	38609i
41	1739	56.9	-12 12	8.9	9.0	A3	5	..	24340b	91	1693	57.1	- 3 53	9.1	9.2	A3	3	..	44407b
42	1740	56.9	-13 0	8.1	9.5	Ma	4	..	24340b	92	1891	57.1	- 6 49	9.1	10.1	Ko	2	..	20895b
43	1675	56.9	-20 26	9.1	8.4	B9	4	..	12631b	93	1803	57.1	- 9 18	9.1	9.1	Ao	5	0,1	24340b
44	1702	56.9	-21 10	9.1	9.5	G5	2	..	12631b	94	1818	57.1	-10 45	6.77	7.55	F8	4	7,7 R	8909b
45	1654	56.9	-22 53	8.7	8.6	G5	4	..	12631b	95	1711	57.1	-16 39	10.1	10.1	Ao	1	..	46170b
46	3523	56.9	-27 26	10.9	9.8	G5	1	..	24433b	96	1651	57.1	-19 4	8.6	8.3	A3	4	..	12631b
47	3005	56.9	-39 20	9.4	9.6	F5	1	..	20534b	97	1657	57.1	-22 26	9.6	8.9	B9	3	..	12631b
48	2551	56.9	-50 1	9.28	9.3	Ao	4	..	38414b	98	3913	57.1	-25 48	6.75	7.7	Ko	8	..	20582b
49	2503	56.9	-50 6	9.64	10.5	Ko	1	..	38414b	99	3529	57.1	-27 10	10.9	9.2	Ao	2	..	20582b
50	1210	56.9	-53 20	8.7	9.2	B9	3	..	10697b	100	3528	57.1	-27 30	10.4	9.2	F8	2	..	20582b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

52700

6^h 57^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3527	57.1	-28 0	11.6	10.1	Ao	1	..	24433b	51	1652	57.3	-19 28	8.7	8.9	Ko	2	..	12631b
2	3791	57.1	-30 24	8.3	8.6	Fo	3	..	20582b	52	1662	57.3	-22 32	9.1	9.3	G5	3	..	12631b
3	3415	57.1	-33 20	6.52	7.5	Ko	..	..	56,123	53	3727	57.3	-26 24	9.5	9.2	Ao	4	..	24433b
4	3272	57.1	-35 42	8.0	8.0	B9	7	..	20534b	54	3776	57.3	-29 40	10.7	10.1	Fo	2	..	24433b
5	3273	57.1	-35 54	7.9	8.8	Fo	5	..	20534b	55	3264	57.3	-35 0	9.15	9.0	A2	4	..	20534b
6	3233	57.1	-37 55	10.2	9.5	F5	2	..	20534b	56	2725	57.3	-41 15	8.0	9.1	Ko	3	..	20671b
7	3086	57.1	-38 17	9.6	10.1	Ko	1	..	20534b	57	2860	57.3	-43 22	8.2	8.9	K2	3	..	20556b
8	1026	57.2	+59 57	6.54	7.54	Ko	8	..	37526i	58	2554	57.3	-49 22	9.2	9.6	Go	3	..	38414b
9	1516	57.2	+34 2	7.46	8.46	Ko	4	..	37527i	59	1161	57.3	-54 58	9.0	9.5	F8	2	..	13007b
10	1461	57.2	+33 38	9.4	9.4	Ao	2	..	37527i	60	733	57.3	-60 58	7.9	9.1	K2	2	..	18486b
11	1441	57.2	+29 31	5.95	6.45	F8	8	..	37527i	61	642	57.3	-64 43	9.2	9.8	G	1	..	15223b
12	1481	57.2	+21 19	8.5	9.3	G5	2	..	38238i	62	347	57.4	+72 7	7.12	8.12	Ko	5	..	37559i
13	1434	57.2	+14 59	9.6	9.6	Ao	3	..	4413m	63	1517	57.4	+34 49	9.07	10.07	Ko	2	..	37447i
14	1530	57.2	+13 50	9.1	10.2	K2	2	..	4413m	64	1307	57.4	+27 9	8.0	8.6	Go	1	..	37478i
15	1531	57.2	+13 14	7.7	8.1	F5	5	0.7	36977i	65	1556	57.4	+25 14	8.2	9.2	Ko	1	E	37478i
16	1384	57.2	+10 13	8.7	9.7	Ko	2	..	15139b	66	1421	57.4	+11 51	8.3	8.3	Ao	3	..	36977i
17	1559	57.2	-0 11	9.08	9.14	A2	3	..	20867b	67	1422	57.4	+11 19	8.3	9.3	Ko	2	..	15139b
18	1695	57.2	-3 8	9.2	9.1	B5	3	..	20867b	68	1517	57.4	+5 49	9.6	9.7	A2	2	..	15139b
19	1927	57.2	-5 53	7.03	8.21	K5	7	3.3	20895b	69	1560	57.4	-0 50	9.1	10.2	K2	1	..	20867b
20	1681	57.2	-8 10	9.4	10.2	G5	3	..	20895b	70	1698	57.4	-3 19	8.7	8.8	A5	7	..	20867b
21	1747	57.2	-11 9	6.57	6.40	B3	5	..	8909b	71	1784	57.4	-5 0	8.80	8.80	Ao	4	..	44407b
22	1748	57.2	-11 48	9.6	10.4	G5	1	..	24340b	72	1805	57.4	-9 4	8.1	8.1	Ao	6	0.1	24340b
23	1749	57.2	-11 53	10.1	10.2	A2	1	..	24340b	73	1820	57.4	-10 57	9.8	9.8	Ao	2	..	24340b
24	1731	57.2	-18 0	9.2	9.2	Ao	4	..	18975b	74	1821	57.4	-11 2	9.1	9.1	Ao	5	..	24340b
25	1660	57.2	-23 4	9.1	9.2	Ko	2	..	12631b	75	1782	57.4	-13 23	9.0	10.2	K5	1	..	24340b
26	3919	57.2	-25 4	9.55	8.9	B9	5	..	24433b	76	1688	57.4	-14 56	8.36	8.44	A3	4	..	18975b
27	3920	57.2	-25 26	11.2	9.8	Ao	1	..	24433b	77	1642	57.4	-18 38	9.2	10.0	G5	2	..	18975b
28	3722	57.2	-26 31	10.2	9.2	Ao	3	..	24433b	78	4763	57.4	-23 21	7.08	8.4	K5	6	..	12631b
29	3723	57.2	-26 46	9.5	8.9	Fo	3	..	20582b	79	3923	57.4	-25 24	8.9	9.2	Ko	3	..	24433b
30	3531	57.2	-27 32	10.2	8.9	Ao	3	..	20582b	80	3535	57.4	-27 17	10.9	9.5	Ao	2	..	24433b
31	3532	57.2	-27 33	8.9	8.0	B3	7	..	20582b	81	3727	57.4	-28 55	8.9	8.4	Ao	5	..	20582b
32	3717	57.2	-28 33	9.7	9.8	Go	1	..	24433b	82	3794	57.4	-30 31	7.32	7.6	Fo	7	..	20582b
33	3772	57.2	-29 47	9.5	10.4	Go	2	..	24433b	83	3294	57.4	-36 31	9.6	9.8	Go	1	..	20534b
34	3235	57.2	-37 54	8.5	8.3	G5	8	..	20534b	84	3297	57.4	-37 2	9.6	11.0	Ko	1	..	20670b
35	3087	57.2	-38 9	11.8	9.9	A	1	..	20534b	85	2727	57.4	-41 32	8.4	8.8	A2	3	..	20671b
36	287	57.2	-77 45	9.9	10.2	F2	2	..	20652b	86	2507	57.4	-50 39	10.0	10.2	A2	2	..	38414b
37	1555	57.3	+36 27	6.70	7.48	G5	6	..	37527i	87	1212	57.4	-53 13	8.5	9.2	F5	2	..	10697b
38	1406	57.3	+30 37	8.6	8.7	A3	3	..	37527i	88	807	57.4	-58 22	8.0	8.2	F2	6	2.4	13007b
39	1435	57.3	+15 24	8.4	9.0	Go	6	..	4413m	89	422	57.4	-74 9	9.6	10.7	K2	2	..	20652b
40	1532	57.3	+13 45	10.3	10.4	A2	2	..	4413m	90	423	57.4	-74 9	9.7	10.8	..	..	..	..
41	1568	57.3	+7 39	9.6	10.1	F8	1	..	15139b	91	200	57.4	-81 58	9.5	10.1	Go	1	..	20557b
42	1516	57.3	+3 38	8.3	8.6	Fo	4	..	37652i	92	161	57.4	-82 46	7.63	8.7	Fo	9	..	20557b
43	1517	57.3	+3 7	8.1	9.1	Ko	1	..	37652i	93	1027	57.5	+60 17	8.6	8.7	A2	6	..	37526i
44	1511	57.3	-1 52	8.5	9.5	Ko	2	..	20867b	94	1646	57.5	+36 57	8.8	8.9	A2	3	..	37447i
45	1804	57.3	-9 45	7.9	8.0	A5	6	2.2	24340b	95	1369	57.5	+16 1	10.3	11.3	Ko	1	..	4413m
46	1750	57.3	-12 2	9.6	9.6	Ao	2	..	24340b	96	..	57.5	+14 34	..	..	F8	2	..	4413m
47	1743	57.3	-12 41	10.5	10.6	A2	2	..	24340b	97	1540	57.5	+14 0	9.6	9.6	A	4	..	4413m
48	1781	57.3	-13 12	10.5	10.5	A	1	..	24340b	98	1533	57.5	+13 21	10.3	11.3	Ko	1	..	4413m
49	1608	57.3	-15 15	8.1	9.3	K5	3	..	18975b	99	1534	57.5	+13 6	8.7	9.0	F2	5	0.2	4413m
50	1714	57.3	-16 56	9.1	9.2	A5	3	..	18975b	100	1493	57.5	+6 33	9.1	9.1	Ao	2	..	37652i

THE HENRY DRAPER CATALOGUE.

52800

6^h 57^m.5

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1699	57.5	- 3 12	9.1	9.9	G5	4	..	20867b	51	3541	57.6	-28 0	11.2	9.8	Fo	1	..	24433b
2	1824	57.5	-10 32	8.9	9.3	F5	4	..	24340b	52	2838	57.6	-40 48	7.4	8.7	Ko	3	..	20671b
3	1745	57.5	-12 22	8.5	9.5	Ko	5	..	24340b	53	2641	57.6	-48 18	10.2	10.8	A2	2	..	38414b
4	1715	57.5	-16 31	9.8	9.9	A3	2	..	46170b	54	1099	57.6	-57 52	8.0	9.5	K2	2	..	13007b
5	1735	57.5	-17 13	8.9	9.9	Ko	2	..	18975b	55	808	57.6	-58 39	9.3	10.1	G5	1	..	13007b
6	1733	57.5	-17 30	7.5	7.6	A2	5	2,9	8909b	56	644	57.6	-64 12	9.9	9.9	A	2	..	15176b
7	1665	57.5	-22 34	10.1	9.3	B9	2	..	12631b	57	415	57.6	-75 7	10.0	10.8	G5	1	..	20652b
8	4764	57.5	-23 24	10.2	8.6	Ao	4	..	12631b	58	904	57.7	+62 43	9.0	9.8	G5	2	..	37545i
9	3927	57.5	-25 29	8.7	8.6	A5	7	..	24433b	59	1165	57.7	+52 53	6.19	6.25	A2	9	..	37515i
10	3730	57.5	-26 16	9.5	8.9	B9	6	..	24433b	60	1391	57.7	+47 54	6.36	6.34	B9	7	..	37515i
11	3731	57.5	-26 49	8.7	8.7	Ko	4	..	20582b	61	1556	57.7	+36 0	9.5	9.9	F5	2	..	37447i
12	3540	57.5	-27 5	6.66	7.3	Bo	10	..	20582b	62	1370	57.7	+16 41	9.3	9.9	Go	5	..	4413m
13	3539	57.5	-27 43	7.9	7.8	A2	8	..	20582b	63	..	57.7	+15 56	..	..	A	1	..	4413m
14	3729	57.5	-28 18	10.2	9.8	G5	1	..	24433b	64	..	57.7	+15 55	..	..	A	1	..	4413m
15	3780	57.5	-29 35	8.0	8.6	Ko	6	..	20582b	65	1403	57.7	+12 0	8.7	9.3	Go	2	..	36977i
16	3797	57.5	-30 28	9.5	8.4	A	4	R	18926b	66	1389	57.7	+10 2	9.9	9.9	Ao	3	..	15139b
17	3265	57.5	-34 33	10.7	10.1	F	2	..	20670b	67	1493	57.7	+ 9 44	9.6	10.4	G5	2	..	15139b
18	3299	57.5	-36 29	8.0	9.2	Ko	2	..	20534b	68	1524	57.7	+ 2 46	8.9	9.0	A2	2	..	39867b
19	3014	57.5	-39 20	8.7	9.0	F5	5	..	20534b	69	1513	57.7	- 1 41	9.6	9.6	Ao	2	..	20867b
20	2736	57.5	-47 18	10.5	10.3	A5	2	..	38414b	70	1807	57.7	- 9 11	9.4	9.4	Ao	3	..	24340b
21	902	57.6	+62 42	7.9	8.7	G5	2	..	37545i	71	1785	57.7	-13 42	9.6	9.6	A	1	..	24340b
22	1645	57.6	+37 44	6.63	7.05	F5	8	R	37447i	72	1689	57.7	-14 13	8.5	8.6	A3	5	..	24340b
23	1645	57.6	+37 44	..	..	A	8	R	37447i	73	1706	57.7	-21 13	8.4	8.7	Go	4	..	12631b
24	1542	57.6	+35 18	10.2	10.5	Fo	2	..	36522i	74	3932	57.7	-25 4	9.20	8.9	B9	6	1,5	24433b
25	1470	57.6	+32 25	9.5	9.6	A5	2	..	37447i	75	3933	57.7	-25 25	10.7	9.3	A	4	R	24433b
26	1308	57.6	+26 59	8.2	9.2	Ko	1	..	37478i	76	3543	57.7	-27 28	9.7	9.8	F8	1	..	24433b
27	1484	57.6	+21 36	8.7	9.0	Fo	3	..	38238i	77	3544	57.7	-27 47	3.68	6.5	K5	..	R	28,199
28	1591	57.6	+19 21	7.73	7.73	Ao	6	..	38238i	78	3787	57.7	-29 14	9.3	8.9	A2	4	..	20582b
29	1459	57.6	+18 30	8.4	9.4	Ko	1	..	38238i	79	632	57.7	-66 51	8.9	9.3	F5	4	..	15223b
30	1483	57.6	+17 0	9.9	10.3	F5	4	R	4413m	80	235	57.7	-80 0	8.89	9.8	Ko	8	..	20652b
31	1436	57.6	+15 41	8.9	9.9	Ko	3	..	4413m	81	240	57.8	+78 56	6.91	7.05	A5	6	..	38330i
32	1436	57.6	+15 41	8.9	9.9	Ko	3	..	4413m	82	617	57.8	+64 46	9.5	10.1	Go	3	..	37545i
33	1437	57.6	+15 24	8.9	8.9	Ao	6	..	4413m	83	1174	57.8	+56 24	8.7	8.7	Ao	5	..	37526i
34	1438	57.6	+15 9	9.1	10.2	K2	3	..	4413m	84	1371	57.8	+15 56	10.3	11.4	K2	1	..	4413m
35	..	57.6	+14 42	..	..	F5	1	..	4413m	85	1541	57.8	+14 48	9.24	9.30	A2	4	..	4413m
36	1539	57.6	+14 29	7.02	7.10	A3	7	1,9	36977i	86	1494	57.8	+ 9 10	7.4	7.8	F5	5	..	37652i
37	1520	57.6	+ 5 26	9.9	9.9	Ao	2	..	15139b	87	1563	57.8	- 0 10	9.6	9.6	Ao	2	..	20867b
38	1519	57.6	+ 3 56	7.6	8.6	Ko	5	..	37652i	88	1901	57.8	- 6 24	10.1	11.5	Ma	..	..	M
39	1785	57.6	- 4 30	8.5	9.7	K5	3	..	44407b	89	1900	57.8	- 6 47	8.7	9.7	Ko	5	..	20895b
40	1695	57.6	- 7 44	8.5	9.0	F8	5	..	20895b	90	1693	57.8	- 8 26	9.1	9.1	Ao	3	..	44407b
41	1753	57.6	-11 26	10.5	10.6	A3	1	..	24340b	91	1810	57.8	- 9 56	9.2	9.8	G	2	R	24340b
42	1747	57.6	-12 29	8.9	8.9	Ao	5	..	24340b	92	1690	57.8	-14 15	8.9	8.9	B9	6	..	24340b
43	1716	57.6	-16 39	8.3	9.4	K2	4	..	18975b	93	4771	57.8	-23 26	10.4	9.0	B9	3	..	12631b
44	1737	57.6	-17 34	8.9	9.2	F2	4	..	18975b	94	4749	57.8	-24 33	9.7	8.9	A3	2	..	12631b
45	1644	57.6	-18 12	9.1	10.1	Ko	1	..	18975b	95	3738	57.8	-26 20	10.9	9.2	Ao	3	..	24433b
46	1645	57.6	-18 29	9.2	9.6	F5	1	..	18975b	96	3737	57.8	-26 49	9.7	9.8	K5	1	..	24433b
47	1666	57.6	-22 59	8.7	8.4	Ao	6	..	12631b	97	3545	57.8	-27 33	8.7	8.9	Ko	4	..	20582b
48	4767	57.6	-23 10	8.5	8.6	G5	5	..	12631b	98	3095	57.8	-38 17	8.4	9.1	G5	3	..	20534b
49	4766	57.6	-23 18	8.3	7.8	B8	8	..	12631b	99	2843	57.8	-40 39	7.0	7.7	Ao	8	..	20556b
50	3542	57.6	-27 54	10.4	9.2	Fo	3	..	24433b	100	2739	57.8	-47 51	9.6	9.7	Fo	4	..	38414b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

52900

6^h 57^m.8

H.D.	D.M.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	D.M.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2647	57.8	-48 35	9.2	10.2	Ko	2	..	38414b	51	1390	58.1	+50 44	9.4	9.4	Ao	2	..	37515i
2	2648	57.8	-48 59	6.54	7.3	G5	10	..	38414b	52	1223	58.1	+46 49	8.4	8.4	Ao	5	0,3	37501i
3	810	57.8	-58 28	8.9	9.5	F8	2	..	13007b	53	1651	58.1	+42 1	8.6	9.1	F8	1	..	37501i
4	737	57.8	-60 42	7.1	8.8	K2	4	..	18486b	54	1649	58.1	+37 54	8.7	9.3	Go	2	..	37447i
5	633	57.8	-66 59	var.	var.	Md	..	R	56,200	55	1545	58.1	+35 41	8.1	8.2	A5	4	..	37527i
6	584	57.8	-68 13	8.6	9.4	G5	2	..	15223b	56	1518	58.1	+34 9	10.0	10.0	A	2	..	37447i
7	1222	57.9	+46 40	9.0	10.0	Ko	1	..	37501i	57	1484	58.1	+17 1	10.3	10.9	Go	2	..	4413m
8	..	57.9	+33 54	..	..	A	1	..	37447i	58	1440	58.1	+14 56	10.3	10.3	Ao	2	..	4413m
9	..	57.9	+15 32	..	..	G	1	..	4413m	59	1544	58.1	+14 15	9.6	9.7	A2	3	..	4413m
10	1543	57.9	+14 35	10.3	10.8	F8	2	..	4413m	60	1428	58.1	+11 6	5.25	6.32	K2	8	..	36977i
11	1542	57.9	+14 21	10.3	11.4	K2	1	..	4413m	61	1392	58.1	+10 55	8.4	8.4	Ao	5	..	15139b
12	1535	57.9	+13 12	9.3	9.3	Ao	3	..	4413m	62	1566	58.1	-0 4	8.73	9.73	Ko	1	..	20867b
13	1496	57.9	+9 17	5.93	5.99	A2	10	..	37652i	63	1790	58.1	-4 37	9.1	9.1	Ao	4	..	44407b
14	1572	57.9	+7 0	8.5	8.6	A2	2	..	37652i	64	1704	58.1	-8 2	8.9	8.9	B8	4	..	44407b
15	1522	57.9	+3 22	8.1	8.1	B9	5	..	37652i	65	1701	58.1	-8 10	9.0	9.0	B8	2	..	44401b
16	1516	57.9	-1 54	8.5	8.6	A2	5	..	20867b	66	1832	58.1	-10 13	8.61	9.03	F5	3	..	24340b
17	1514	57.9	-2 4	8.57	8.85	Fo	4	..	20867b	67	1831	58.1	-10 37	10.1	10.1	Ao	2	..	24340b
18	1788	57.9	-4 6	4.89	4.72	B3	..	1,9	56,83	68	1750	58.1	-13 3	7.9	7.9	B9	4	..	8909b
19	1902	57.9	-6 39	9.1	10.3	K5	4	..	20895b	69	1789	58.1	-13 33	9.2	9.3	A2	2	..	24340b
20	1903	57.9	-6 53	8.5	8.8	F2	8	2,3	20895b	70	1710	58.1	-21 36	8.6	8.3	A2	6	..	12631b
21	1701	57.9	-7 38	9.1	9.1	Ao	4	..	20895b	71	1711	58.1	-21 41	9.2	8.6	Ao	4	..	12631b
22	1697	57.9	-8 18	9.2	9.2	B9	3	..	44407b	72	1393	58.2	+47 37	8.5	9.0	F8	2	..	37438i
23	1787	57.9	-14 4	9.2	9.2	Ao	3	..	24340b	73	1687	58.2	+20 43	var.	var.	Gop	..	R	1469c
24	1692	57.9	-14 12	9.8	9.9	A2	3	..	24340b	74	1372	58.2	+16 20	8.2	9.2	Ko	6	0,1	4413m
25	4773	57.9	-23 21	8.3	8.4	G5	5	..	12631b	75	1441	58.2	+15 27	9.3	10.3	Ko	3	..	4413m
26	4750	57.9	-24 23	10.2	9.2	G5	2	..	12631b	76	1406	58.2	+12 44	6.17	7.35	K5	6	..	36977i
27	3941	57.9	-25 34	8.3	8.9	F5	6	..	24433b	77	1501	58.2	+6 48	8.5	8.6	A2	2	..	37652i
28	3741	57.9	-26 8	9.5	9.2	B9	5	..	24433b	78	1523	58.2	+3 1	8.9	10.1	K5	1	..	39867b
29	3742	57.9	-26 21	8.3	8.3	B9	7	..	24433b	79	1896	58.2	-3 1	9.4	9.4	B8	6	..	20867b
30	3743	57.9	-26 33	7.4	8.0	Ao	9	..	24433b	80	1706	58.2	-8 12	8.4	8.4	B9	5	..	44407b
31	3428	57.9	-33 12	9.0	9.8	Ko	3	..	20670b	81	1705	58.2	-8 49	10.1	10.1	Ao	1	..	44407b
32	2846	57.9	-40 56	9.4	10.2	K2	2	..	20671b	82	1757	58.2	-11 38	9.8	9.9	A2	2	..	24340b
33	740	57.9	-59 54	9.3	9.7	F5	1	..	15176b	83	1756	58.2	-11 46	9.4	10.2	G5	2	..	24340b
34	1648	58.0	+37 7	8.6	9.7	K2	3	..	37447i	84	1752	58.2	-12 57	7.9	7.9	Ao	3	..	8909b
35	1557	58.0	+36 45	7.8	8.6	G5	3	..	37527i	85	1720	58.2	-16 50	8.9	9.9	Ko	4	..	18975b
36	1544	58.0	+35 44	9.4	10.0	Go	3	..	37447i	86	1743	58.2	-17 26	7.7	7.7	B9	5	1,9	8909b
37	1629	58.0	+8 52	7.9	7.9	Ao	6	..	15139b	87	1742	58.2	-17 38	9.1	9.7	Go	2	..	18975b
38	1699	58.0	-8 19	7.8	8.9	K2	2	..	44407b	88	1686	58.2	-20 32	9.4	9.2	Ao	2	..	12631b
39	1698	58.0	-8 40	9.2	9.7	F8	2	..	44407b	89	4776	58.2	-23 57	9.3	9.8	K2	1	..	12631b
40	1811	58.0	-9 16	9.1	9.1	Ao	4	..	24340b	90	3743	58.2	-28 30	8.3	9.2	Ko	2	..	20582b
41	1828	58.0	-10 41	9.2	9.8	Go	1	..	24340b	91	3739	58.2	-28 47	9.0	8.7	F5	3	..	20582b
42	1755	58.0	-11 19	8.7	8.6	B5	6	..	24340b	92	3274	58.2	-34 17	9.4	9.4	Fo	4	..	20670b
43	4752	58.0	-24 7	10.0	9.2	G5	1	..	12631b	93	3282	58.2	-35 24	6.62	7.1	B9	6	..	7406b
44	3942	58.0	-25 41	11.2	9.8	Go	1	..	24433b	94	476	58.3	+67 27	8.6	9.6	Ko	3	..	37545i
45	3745	58.0	-26 26	9.7	8.7	B9	6	..	24433b	95	1166	58.3	+55 53	9.2	9.5	F	2	..	37526i
46	3279	58.0	-35 12	7.75	8.9	Ko	5	..	20534b	96	1464	58.3	+18 49	7.02	7.08	A2	7	..	38238i
47	3307	58.0	-37 1	9.4	10.2	Go	2	..	20670b	97	1442	58.3	+15 24	8.9	9.3	F5	6	..	4413m
48	2832	58.0	-46 17	10.2	10.0	A2	2	..	38414b	98	1545	58.3	+14 49	8.11	9.11	Ko	7	0,2	4413m
49	1123	58.0	-55 35	9.5	9.5	Ao	3	..	13007b	99	1546	58.3	+14 14	8.9	9.9	Ko	3	..	4413m
50	997	58.1	+58 29	9.2	9.2	Ao	3	..	37526i	100	1536	58.3	+13 6	8.9	10.1	K5	2	..	4413m

THE HENRY DRAPER CATALOGUE.

53000

6^h 58^m.3

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1498	58.3	+ 9 11	8.9	9.7	G5	2	..	15139b	51	1467	58.5	+ 18 12	8.1	8.7	Go	1	..	38238i
2	1575	58.3	+ 7 44	8.5	9.3	G5	3	..	15139b	52	1630	58.5	+ 8 50	8.8	9.6	G5	2	..	15139b
3	1530	58.3	+ 2 35	7.03	7.59	Go	6	R	37652i	53	1632	58.5	+ 8 23	7.7	8.5	G5	5	0,2	15139b
4	1776	58.3	+ 0 29	7.9	7.9	B9	6	..	37652i	54	1503	58.5	+ 6 1	8.3	8.4	A2	3	..	37652i
5	1517	58.3	- 1 55	8.62	8.68	A2	4	..	20867b	55	1778	58.5	+ 0 14	9.3	10.3	Ko	2	..	20867b
6	1704	58.3	- 3 53	9.1	10.3	K5	2	..	44407b	56	1899	58.5	- 2 53	7.9	8.0	A3	5	0,8	38609i
7	1904	58.3	- 6 45	8.7	9.9	K5	2	..	20895b	57	1794	58.5	- 4 40	9.1	10.2	K2	3	..	44407b
8	1705	58.3	- 7 20	9.1	9.1	Ao	1	..	20895b	58	1711	58.5	- 8 22	9.1	9.1	A	2	R	44407b
9	1706	58.3	- 7 26	9.0	9.3	Fo	4	..	20895b	59	1816	58.5	- 9 25	9.1	10.1	Ko	2	..	24340b
10	1833	58.3	- 10 58	9.0	9.0	B9	4	..	24340b	60	1836	58.5	- 10 59	8.4	8.4	Ao	8	..	24340b
11	1758	58.3	- 11 50	10.1	10.2	A5	1	..	24340b	61	1795	58.5	- 14 2	9.2	9.2	Ao	4	..	24340b
12	1791	58.3	- 13 5	7.9	8.3	F5	2	..	8909b	62	1615	58.5	- 15 35	9.4	9.4	Ao	3	2,3	46170b
13	1723	58.3	- 16 33	6.90	7.90	Ko	7	0,3	18975b	63	1689	58.5	- 20 11	9.03	8.7	B9	3	..	12631b
14	1648	58.3	- 18 12	9.2	9.3	A2	2	..	18975b	64	1716	58.5	- 21 7	9.4	9.0	Ao	3	..	12631b
15	1656	58.3	- 19 38	7.9	8.0	A2	7	..	12631b	65	3762	58.5	- 26 12	9.5	10.1	Ao	5	..	24433b
16	1688	58.3	- 20 51	9.4	9.2	Fo	2	..	12631b	66	3763	58.5	- 26 30	11.2	9.7	Ao	2	..	24433b
17	1687	58.3	- 20 58	9.1	8.6	A2	4	..	12631b	67	3555	58.5	- 27 26	10.7	9.2	B9	3	..	24433b
18	4781	58.3	- 23 9	9.7	9.0	F2	3	..	12631b	68	3807	58.5	- 29 32	9.5	10.1	A2	2	..	24433b
19	4755	58.3	- 24 44	9.7	8.9	B8	3	..	12631b	69	3438	58.5	- 33 5	9.4	10.6	F2	2	..	20670b
20	3948	58.3	- 25 3	8.75	9.2	Ko	4	..	12631b	70	3105	58.5	- 38 10	10.0	10.4	Ko	1	..	20534b
21	3752	58.3	- 26 22	9.7	9.2	B9	4	..	24433b	71	2856	58.5	- 40 45	7.1	7.3	B5	3	..	8969b
22	3802	58.3	- 29 46	11.2	11.0	Ao	2	..	24433b	72	2517	58.5	- 50 58	9.1	8.8	A2	4	..	38414b
23	3099	58.3	- 38 28	9.4	9.7	Go	2	..	20534b	73	506	58.5	- 71 54	7.3	7.9	Go	5	..	15168b
24	3081	58.3	- 44 46	8.24	9.1	K5	3	..	20858b	74	104	58.5	- 84 31	9.6	10.8	K5	1	..	22238b
25	2836	58.3	- 46 5	9.0	10.3	K5	1	..	38414b	75	1167	58.6	+ 55 20	8.0	8.5	F8	4	..	37526i
26	751	58.3	- 62 1	8.8	10.0	K5	1	..	15176b	76	1787	58.6	+ 40 29	8.6	9.6	Ko	1	..	37501i
27	544	58.3	- 72 30	8.9	9.7	G5	1	..	15168b	77	1464	58.6	+ 33 55	9.1	10.1	Ko	2	..	37447i
28	1520	58.4	+ 34 26	8.7	8.7	B9	3	..	37527i	78	1413	58.6	+ 30 30	7.24	8.02	G5	5	..	37527i
29	1486	58.4	+ 16 58	9.9	9.9	Ao	3	..	4413m	79	1443	58.6	+ 15 1	8.9	8.9	Ao	7	0,1R	4413m
30	1549	58.4	+ 14 9	8.3	8.3	Ao	2	..	36977i	80	1499	58.6	+ 9 38	10.3	10.3	Ao	2	..	15139b
31	1548	58.4	+ 14 1	10.3	10.3	A	3	..	4413m	81	1631	58.6	+ 8 50	9.6	9.6	B9	3	..	15139b
32	1898	58.4	- 2 36	9.6	9.7	A2	3	..	20867b	82	1660	58.6	+ 1 41	8.7	8.7	Ao	2	..	29867b
33	1793	58.4	- 4 7	8.3	9.3	Ko	3	..	38609i	83	1571	58.6	- 0 25	7.08	7.03	B8	8	1,6	37700i
34	1814	58.4	- 9 27	9.2	9.2	Ao	2	..	24340b	84	1520	58.6	- 1 45	9.6	9.6	Ao	2	..	20867b
35	1834	58.4	- 11 3	8.1	8.0	B5	8	..	24340b	85	1900	58.6	- 2 20	8.3	8.3	B8	7	1,10	38609i
36	1658	58.4	- 19 58	9.13	9.7	Ko	1	..	12631b	86	1756	58.6	- 12 4	9.1	10.2	K2	3	..	24340b
37	1714	58.4	- 21 21	9.2	8.7	B9	4	..	12631b	87	1619	58.6	- 15 39	9.2	9.2	Ao	2	..	46170b
38	1713	58.4	- 21 53	8.1	8.9	Ko	4	..	12631b	88	1617	58.6	- 15 52	7.9	9.1	K5	6	..	18975b
39	3949	58.4	- 25 52	10.9	9.8	Ao	2	..	24433b	89	1618	58.6	- 16 2	8.9	9.4	F8	4	..	18975b
40	3755	58.4	- 26 36	10.0	9.0	B8	5	..	24433b	90	1748	58.6	- 17 28	9.4	9.5	A2	2	..	18975b
41	3744	58.4	- 28 8	7.5	8.1	B8	8	..	20582b	91	1650	58.6	- 18 12	8.3	8.3	B9	7	0,3	18975b
42	3277	58.4	- 34 39	9.0	9.1	A3	3	..	20534b	92	4793	58.6	- 23 32	10.2	9.7	Ko	1	..	12631b
43	3283	58.4	- 35 27	10.0	9.2	A2	3	..	20534b	93	3765	58.6	- 26 9	10.9	9.7	Ao	2	..	24433b
44	3284	58.4	- 35 38	9.0	9.7	Ko	1	..	20534b	94	3766	58.6	- 26 30	10.4	9.2	Ao	3	..	24433b
45	3315	58.4	- 36 45	9.8	10.0	F8	1	..	20670b	95	3751	58.6	- 28 7	10.7	9.7	A3	2	..	24433b
46	2565	58.4	- 49 34	7.8	9.1	Ko	5	..	38414b	96	3279	58.6	- 34 46	10.0	10.0	Fo	3	..	20670b
47	2224	58.4	- 51 16	5.02	7.1	Ma	..	0,4	56,123	97	3247	58.6	- 37 18	9.8	11.1	K5	1	..	20670b
48	1218	58.4	- 56 46	7.6	7.9	B8	8	..	13007b	98	2860	58.6	- 40 15	9.4	9.6	G5	2	..	20670b
49	1217	58.4	- 56 57	9.1	9.5	Go	2	..	13007b	99	2749	58.6	- 47 57	9.6	10.3	Ko	1	..	38414b
50	1176	58.5	+ 56 48	8.6	9.6	Ko	2	..	37526i	100	2655	58.6	- 48 22	9.8	10.8	G5	1	..	38414b

ANNALS OF HARVARD COLLEGE OBSERVATORY.

53100

6^h 58^m.6

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	2518	58.6	-50 28	9.8	9.9	Ao	3	..	38414b	51	..	58.9	+16 7	..	..	A	1	..	4413m
2	2228	58.6	-51 54	9.0	8.8	F5	2	..	10697b	52	1375	58.9	+15 58	8.8	8.8	Ao	7	2,3	4413m
3	646	58.6	-64 33	8.8	9.8	Ko	2	..	15223b	53	1447	58.9	+15 25	8.8	8.8	B9	2	..	36977i
4	681	58.6	-65 4	9.2	10.2	K	1	..	15223b	54	1448	58.9	+15 2	10.3	11.1	G5	1	..	4413m
5	404	58.7	+69 31	8.0	9.2	K5	3	..	38155i	55	1408	58.9	+12 20	8.9	9.4	F8	1	..	36977i
6	1396	58.7	+47 14	8.2	8.6	F5	3	3,2	37501i	56	1504	58.9	+ 6 23	9.6	9.7	A2	2	..	15139b
7	1559	58.7	+36 30	9.5	9.5	Ao	3	..	37447i	57	1524	58.9	+ 5 21	8.7	9.5	G5	1	..	15139b
8	1521	58.7	+34 1	9.5	9.6	A5	1	..	37447i	58	1903	58.9	- 2 6	9.2	9.5	F2	2	..	20867b
9	1469	58.7	+18 53	8.4	8.8	F5	2	..	38238i	59	1841	58.9	-10 23	9.4	9.7	F2	2	..	2434ob
10	1444	58.7	+15 23	7.14	7.20	A2	6	2,9	36977i	60	1718	58.9	-21 18	8.7	9.5	K5	2	..	12631b
11	1445	58.7	+15 1	7.4	8.4	Ko	8	0,2 R	4413m	61	1674	58.9	-22 41	8.4	8.6	Ko	4	..	12631b
12	1633	58.7	+ 8 24	9.3	9.3	B8	2	..	15139b	62	1673	58.9	-23 3	10.9	9.7	Ao	2	..	12631b
13	1523	58.7	+ 5 17	7.41	8.41	Ko	4	..	37652i	63	4768	58.9	-24 21	10.4	9.2	Fo	2	..	12631b
14	1781	58.7	+ 0 50	8.69	9.19	F8	3	0,1	20867b	64	2884	58.9	-45 39	8.2	9.4	K5	3	..	20858b
15	1780	58.7	+ 0 17	9.3	9.8	F8	2	..	20867b	65	1168	58.9	-54 32	8.6	9.8	K5	2	..	13007b
16	1572	58.7	- 0 58	8.5	8.5	Ao	4	..	20867b	66	816	58.9	-58 15	7.6	8.3	Ao	5	0,8	15176b
17	1910	58.7	- 6 11	9.4	9.4	Ao	2	..	44407b	67	742	58.9	-59 49	8.7	9.8	Ko	1	..	15176b
18	1908	58.7	- 6 32	8.9	9.4	F8	4	..	20895b	68	481	59.0	+66 7	8.4	9.2	G5	2	..	37545i
19	1911	58.7	- 6 46	8.1	9.2	K2	4	0,2-	20895b	69	909	59.0	+62 29	8.7	9.7	Ko	3	..	37545i
20	1714	58.7	- 8 19	9.1	9.1	Ao	2	R	44407b	70	1107	59.0	+54 44	9.4	10.8	Ma	..	..	M
21	1620	58.7	-15 7	8.91	9.91	Ko	1	..	15402b	71	1788	59.0	+40 1	8.77	8.83	A2	2	E	37501i
22	1691	58.7	-20 36	8.7	8.4	B9	5	..	12631b	72	1450	59.0	+15 23	10.3	10.3	A	1	..	4413m
23	4761	58.7	-24 26	6.96	7.5	Ao	4	E	42935b	73	1635	59.0	+ 8 24	7.9	8.0	A2	4	..	37652i
24	3770	58.7	-26 6	9.5	8.9	B8	7	..	24433b	74	1662	59.0	+ 1 22	8.7	9.1	F5	2	..	39867b
25	3319	58.7	-36 24	8.7	8.9	A2	5	..	20534b	75	1783	59.0	+ 0 10	8.9	9.7	G5	3	..	20867b
26	682	58.7	-69 14	8.6	9.1	F8	2	..	15223b	76	1904	59.0	- 2 14	9.2	9.2	Ao	4	..	20867b
27	480	58.8	+66 13	8.0	8.1	A2	6	..	37545i	77	1797	59.0	- 4 29	8.3	9.5	K5	1	..	38609i
28	1106	58.8	+54 38	8.2	9.2	Ko	3	..	37526i	78	1722	59.0	- 8 7	9.8	9.8	Ao	1	..	44407b
29	1387	58.8	+45 1	8.17	9.35	K5	2	..	37501i	79	1760	59.0	-11 24	9.1	8.9	Bp	4	R	2434ob
30	1467	58.8	+33 52	8.5	9.5	Ko	3	..	37447i	80	1732	59.0	-16 37	9.4	9.5	A2	2	..	15402b
31	1373	58.8	+16 53	8.8	9.2	F5	5	..	4413m	81	1653	59.0	-18 42	9.2	10.2	Ko	2	..	18975b
32	1446	58.8	+15 42	8.9	8.9	Ao	5	0,1	4413m	82	1677	59.0	-22 55	9.1	9.2	G5	2	..	12631b
33	1531	58.8	+ 2 2	8.2	8.7	F8	3	..	37652i	83	3962	59.0	-25 11	8.25	8.9	Ko	7	..	12631b
34	1522	58.8	- 2 0	9.6	9.6	Ao	1	..	20867b	84	3774	59.0	-26 20	9.5	9.7	Go	1	..	24433b
35	1709	58.8	- 3 52	9.4	9.4	B9	3	R	44407b	85	3762	59.0	-28 20	10.9	10.0	G	1	..	24433b
36	1712	58.8	- 7 42	8.9	8.9	B8	4	..	44407b	86	3764	59.0	-28 28	9.5	8.9	Ao	5	..	24433b
37	1662	58.8	-19 10	9.4	9.5	Ko	1	..	12631b	87	3321	59.0	-36 28	9.4	9.5	G5	2	..	20534b
38	4797	58.8	-23 41	3.12	3.00	B5p	..	R	28,199	88	3320	59.0	-37 2	8.0	8.5	A3	6	..	20534b
39	4765	58.8	-24 5	7.4	8.3	Ko	6	..	12631b	89	2742	59.0	-41 5	10.2	9.9	F	2	..	20671b
40	3561	58.8	-27 6	11.2	9.8	A2	1	..	24433b	90	2885	59.0	-45 22	9.4	9.4	G5	1	..	20858b
41	3030	58.8	-39 24	10.0	10.2	Ko	1	..	20534b	91	742	59.0	-60 43	7.9	7.9	B8	7	..	18486b
42	2520	58.8	-50 19	7.28	7.3	Ao	3	..	8951b	92	436	59.1	+70 44	9.5	9.5	A	1	..	37559i
43	754	58.8	-61 12	7.1	8.3	G5	8	..	18486b	93	1169	59.1	+55 38	8.9	9.5	Go	2	..	37526i
44	288	58.8	-77 39	7.5	7.6	A2	10	..	20652b	94	1523	59.1	+34 53	9.8	9.9	A2	2	..	37447i
45	1101	58.9	+53 12	8.9	9.0	A5	2	..	37515i	95	1484	59.1	+31 31	8.7	8.8	A3	3	..	37527i
46	1577	58.9	+44 46	9.27	9.27	Ao	2	..	37501i	96	1378	59.1	+16 2	10.3	11.3	Ko	1	..	4413m
47	1451	58.9	+29 52	8.6	8.6	Ao	3	2,2	37527i	97	1551	59.1	+14 33	10.3	10.3	A	1	..	4413m
48	1473	58.9	+18 20	8.7	8.7	Ao	2	..	38238i	98	1552	59.1	+14 32	10.3	10.3	Ao	2	..	4413m
49	1377	58.9	+16 20	9.9	9.9	B9	4	..	4413m	99	1540	59.1	+13 23	8.9	9.7	G5	3	..	4413m
50	1376	58.9	+16 19	8.5	8.6	A5	6	..	4413m	100	1396	59.1	+10 50	8.9	9.0	A2	3	..	15139b

THE HENRY DRAPER CATALOGUE.

53200

6^h 59^m.1

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1526	59.1	+ 5 46	8.9	9.3	F5	3	..	15139b	51	3571	59.2	-27 55	8.5	8.6	A2	5	..	20582b
2	1567	59.1	+ 4 43	7.45	7.43	B9	7	..	37652i	52	2915	59.2	-42 29	7.09	7.3	B8	2	0,8	8969b
3	1566	59.1	+ 4 10	7.7	8.5	G5	5	..	37652i	53	2882	59.2	-43 15	6.38	6.6	A0	3	1,10	8969b
4	1663	59.1	+ 1 39	7.40	7.38	B9	4	..	37652i	54	2665	59.2	-48 40	10.5	9.6	A0	4	..	38414b
5	1665	59.1	+ 1 38	6.46	6.44	B9	6	..	37652i	55	935	59.3	+61 23	8.8	10.2	Mb	3	..	37526i
6	1666	59.1	+ 1 14	9.6	9.6	A0	1	..	39867b	56	1454	59.3	+29 40	8.4	8.4	B9	4	1,3	37527i
7	1574	59.1	- 0 31	8.7	8.7	B8	2	..	37700i	57	1566	59.3	+22 47	5.91	5.91	A0	10	..	38238i
8	1943	59.1	- 5 10	5.88	6.88	K0	..	2,5	56,83	58	1453	59.3	+15 45	10.3	10.6	F0	2	..	4413m
9	1817	59.1	- 9 12	9.4	9.4	A0	1	..	44407b	59	1452	59.3	+15 9	9.3	10.1	G5	3	..	4413m
10	4774	59.1	-24 10	9.5	9.3	K5	1	..	12631b	60	1554	59.3	+14 30	8.9	9.9	K0	3	..	4413m
11	4773	59.1	-24 12	10.0	8.9	B9	3	..	12631b	61	1508	59.3	+ 6 4	7.8	8.8	K0	3	..	37652i
12	3568	59.1	-27 6	10.7	9.5	A0	3	..	24433b	62	1569	59.3	+ 4 0	8.2	8.3	A5	4	..	37652i
13	3569	59.1	-27 17	10.7	8.9	B9	5	..	24433b	63	1668	59.3	+ 1 4	9.09	9.17	A3	3	..	39867b
14	3570	59.1	-27 31	9.5	9.2	B9	4	..	24433b	64	1577	59.3	- 0 55	10.3	10.3	A0	2	..	20867b
15	3766	59.1	-28 20	10.4	10.1	K2	1	..	24433b	65	1713	59.3	- 3 7	9.1	9.1	A0	5	..	20867b
16	3444	59.1	-33 8	9.0	8.9	F2	4	..	20670b	66	1822	59.3	- 9 8	9.6	9.7	A2	1	..	44407b
17	3284	59.1	-34 6	10.0	10.3	K0	1	..	20670b	67	1761	59.3	-12 57	7.22	8.29	K2	1	..	8909b
18	3287	59.1	-34 19	10.7	10.0	A2	3	..	20670b	68	1735	59.3	-16 26	10.1	10.1	A0	2	..	15402b
19	3297	59.1	-35 17	10.0	9.7	A2	1	..	20534b	69	1695	59.3	-20 59	9.2	8.9	B9	3	..	12631b
20	3250	59.1	-37 54	8.0	8.3	F0	8	..	20534b	70	1721	59.3	-21 46	8.1	8.6	F5	5	..	12631b
21	3113	59.1	-38 12	10.7	10.5	A5	2	..	20534b	71	3970	59.3	-25 3	10.2	9.2	A0	1	..	12631b
22	2744	59.1	-41 27	8.8	9.3	G0	4	..	20671b	72	3969	59.3	-25 58	9.5	8.9	F0	4	..	24433b
23	2847	59.1	-46 47	9.6	9.7	A0	4	..	38414b	73	3781	59.3	-26 24	11.6	9.8	A	1	..	24433b
24	755	59.1	-61 38	8.9	9.5	A5	2	..	15176b	74	3574	59.3	-27 4	11.4	9.8	A0	1	..	24433b
25	182	59.2	+83 39	8.2	8.2	B9	4	..	37546i	75	2916	59.3	-42 57	10.2	10.2	F5	1	..	20671b
26	618	59.2	+64 31	8.4	8.4	A0	6	..	37545i	76	2883	59.3	-43 26	9.4	9.7	F5	2	..	20671b
27	998	59.2	+58 40	8.6	8.6	A0	5	..	37526i	77	2849	59.3	-46 17	9.8	9.7	G0	3	..	38414b
28	1563	59.2	+36 43	6.96	7.74	G5	5	..	37527i	78	1169	59.3	-54 58	8.87	9.8	K0	2	..	13007b
29	1562	59.2	+36 12	9.0	9.6	G0	4	..	37447i	79	1107	59.3	-58 3	7.9	9.0	F5	4	..	13007b
30	1589	59.2	+23 20	8.53	8.59	A2	2	..	38238i	80	746	59.3	-60 40	8.9	10.0	K5	1	..	15176b
31	1379	59.2	+16 22	8.9	9.9	K0	5	..	4413m	81	482	59.4	+66 56	9.5	9.6	A2	1	..	38155i
32	..	59.2	+15 51	..	..	A	1	..	4413m	82	1051	59.4	+59 24	8.9	9.9	K0	2	..	37526i
33	1541	59.2	+13 47	10.3	10.3	A	1	..	4413m	83	1590	59.4	+49 37	7.72	8.00	F0	5	..	37515i
34	1398	59.2	+ 9 59	10.3	10.4	A3	2	..	15139b	84	1651	59.4	+37 49	9.4	9.5	A5	2	..	37447i
35	1506	59.2	+ 6 27	8.7	9.8	K2	1	..	15139b	85	1652	59.4	+37 29	9.8	10.1	F0	2	..	37447i
36	1532	59.2	+ 2 5	9.6	9.6	A0	2	..	39867b	86	1550	59.4	+35 38	9.8	10.8	K0	1	..	37447i
37	1534	59.2	+ 1 59	9.1	9.9	G5	1	..	39867b	87	1487	59.4	+31 34	6.80	8.15	Ma	4	..	37527i
38	1525	59.2	- 1 58	8.27	8.27	A0	7	..	20867b	88	1695	59.4	+19 58	8.50	8.50	A0	3	..	38238i
39	1906	59.2	- 2 20	10.1	10.1	A0	2	..	20867b	89	1455	59.4	+15 38	10.3	11.1	G5	2	..	4413m
40	1818	59.2	- 9 58	6.42	6.37	B8	7	0,7-	38609i	90	1454	59.4	+15 28	9.3	9.3	A	4	..	4413m
41	1760	59.2	-12 25	8.7	9.7	K0	3	..	24340b	91	1556	59.4	+14 54	9.9	10.9	K0	2	..	4413m
42	1800	59.2	-13 50	9.4	10.6	K5	1	..	46170b	92	..	59.4	+14 40	..	..	G5	1	..	4413m
43	1626	59.2	-15 9	8.36	9.36	K0	3	R	15402b	93	1555	59.4	+14 22	8.7	9.7	K0	5	2,1	4413m
44	1625	59.2	-15 29	4.07	3.95	B5	..	R	1755c	94	1542	59.4	+13 35	10.3	10.4	A3	1	..	4413m
45	1751	59.2	-17 54	10.1	10.1	A0	1	..	15402b	95	1410	59.4	+12 14	8.9	8.9	A0	1	..	36977i
46	1678	59.2	-22 26	8.5	8.7	G0	5	..	12631b	96	1509	59.4	+ 6 48	8.4	8.4	B9	3	..	37652i
47	4802	59.2	-23 30	9.0	9.0	K2	3	..	12631b	97	1535	59.4	+ 2 24	8.5	9.0	F8	2	..	39867b
48	3965	59.2	-25 43	9.5	8.9	A0	6	..	24433b	98	1670	59.4	+ 1 20	8.8	8.9	A2	4	2,3	39867b
49	3779	59.2	-26 27	11.2	9.8	A	1	..	24433b	99	1908	59.4	- 2 55	8.6	9.4	G5	5	..	20867b
50	3572	59.2	-27 14	10.9	9.7	A0	3	..	24433b	100	1945	59.4	- 5 9	8.00	8.00	A0	2	..	38609i

ANNALS OF HARVARD COLLEGE OBSERVATORY.

53300

6h 59m.4

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	1716	m. 59.4	° 7 44	9.1	9.4	F2	1	..	44407b	51	464	m. 59.7	+ 68 45	8.6	9.6	Ko	1	..	38155i
2	1846	59.4	- 10 8	8.16	8.22	A2	4	..	24340b	52	1171	59.7	+ 55 34	8.6	9.4	G5	3	..	37526i
3	1763	59.4	- 12 8	8.1	8.1	B9	4	..	8909b	53	1590	59.7	+ 41 19	8.9	9.7	G5	1	..	37501i
4	1762	59.4	- 13 0	9.1	9.1	Ao	3	..	24340b	54	1469	59.7	+ 33 50	9.5	9.5	A	1	..	37527i
5	1752	59.4	- 17 20	9.4	10.5	K2	1	..	46170b	55	1591	59.7	+ 23 26	8.6	9.0	F5	2	..	38238i
6	1656	59.4	- 18 54	9.1	9.2	A2	4	..	12631b	56	1456	59.7	+ 15 32	9.3	9.7	F5	4	..	4413m
7	1698	59.4	- 20 17	9.1	8.9	A3	3	..	12631b	57	..	59.7	+ 15 25	..	..	F2	1	..	4413m
8	1680	59.4	- 22 49	9.2	9.2	F8	2	..	12631b	58	1638	59.7	+ 8 41	8.3	9.3	Ko	3	..	15139b
9	3972	59.4	- 25 36	9.2	9.0	Ao	5	..	24433b	59	1673	59.7	+ 1 43	8.8	9.8	Ko	1	..	39867b
10	3784	59.4	- 26 58	8.7	8.7	A2	6	..	24433b	60	1674	59.7	+ 1 15	8.5	8.5	Ao	6	1,3	39867b
11	3446	59.4	- 33 4	10.7	9.2	Ao	3	..	20670b	61	1533	59.7	- 1 32	8.4	8.4	Ao	5	..	20867b
12	2761	59.4	- 47 57	8.8	8.5	Ao	6	..	38414b	62	1717	59.7	- 3 55	9.4	9.7	Fo	3	..	44407b
13	276	59.5	+ 77 13	8.6	9.0	F5	4	..	37559i	63	1802	59.7	- 4 49	9.1	10.2	K2	2	..	44407b
14	1468	59.5	+ 33 53	7.9	8.7	G5	2	..	37527i	64	1950	59.7	- 5 25	9.6	9.6	B9	4	..	44407b
15	1380	59.5	+ 16 53	8.5	9.0	F8	7	0,2	4413m	65	1951	59.7	- 5 47	9.4	9.4	Ao	2	..	44407b
16	1530	59.5	- 1 38	9.3	9.3	Ao	2	..	20867b	66	1719	59.7	- 7 8	8.9	8.9	Ao	4	..	20895b
17	1531	59.5	- 1 46	9.3	9.3	B9	4	..	20867b	67	1848	59.7	- 10 18	7.01	6.77	Bo	7	..	24340b
18	1946	59.5	- 5 54	9.6	9.6	Ao	3	..	44407b	68	1802	59.7	- 13 35	8.3	8.3	Ao	7	..	24340b
19	1764	59.5	- 12 44	9.2	9.2	Ao	3	..	24340b	69	1758	59.7	- 17 13	9.6	9.6	Ao	1	..	15402b
20	1736	59.5	- 16 45	9.1	9.1	Ao	4	..	15402b	70	1756	59.7	- 17 18	9.2	9.7	F8	1	..	15402b
21	4807	59.5	- 23 42	10.7	9.0	B9	3	..	12631b	71	1726	59.7	- 21 38	8.9	8.4	B8	5	..	12631b
22	3786	59.5	- 26 51	9.5	9.8	K	1	..	24433b	72	1681	59.7	- 22 10	8.9	9.0	G5	3	..	12631b
23	3579	59.5	- 27 31	11.6	9.8	A	2	..	24433b	73	3976	59.7	- 25 30	8.0	8.0	B5	9	..	24433b
24	3257	59.5	- 37 39	10.2	9.5	F8	3	..	20534b	74	3796	59.7	- 26 6	10.9	9.8	Ao	2	..	24433b
25	2669	59.5	- 48 51	8.3	8.4	A2	6	..	38414b	75	3782	59.7	- 28 52	8.7	8.9	Ko	3	..	24433b
26	2527	59.5	- 51 2	9.8	9.7	Ao	3	..	38414b	76	3968	59.7	- 31 39	8.7	9.1	G	1	..	18926b
27	747	59.5	- 61 0	7.6	7.8	B9	7	..	18486b	77	2754	59.7	- 41 6	9.4	10.2	K	1	..	20671b
28	419	59.5	- 73 34	9.4	10.4	Ko	2	..	20652b	78	2755	59.7	- 41 22	9.4	9.6	F2	2	..	20671b
29	1524	59.6	+ 34 38	5.60	6.38	G5	9	..	37527i	79	756	59.7	- 61 24	8.9	9.7	G5	1	..	15176b
30	1381	59.6	+ 16 31	7.7	8.7	Ko	8	5,3	4413m	80	424	59.7	- 74 22	9.2	9.7	F8	4	..	20652b
31	1557	59.6	+ 14 23	9.6	10.4	G5	1	..	4413m	81	1644	59.8	+ 43 0	8.5	9.3	G5	3	..	37501i
32	1543	59.6	+ 13 18	9.9	10.9	Ko	1	..	4413m	82	1309	59.8	+ 28 8	9.1	10.5	Ma	..	..	M
33	1533	59.6	+ 3 52	8.9	8.9	B8	2	..	37652i	83	1504	59.8	+ 21 51	9.4	9.4	A	1	..	38238i
34	1536	59.6	+ 2 22	8.7	8.7	B9	3	..	37652i	84	1503	59.8	+ 21 8	8.2	8.2	B9	6	..	38238i
35	1579	59.6	- 0 20	8.9	9.2	Fo	3	..	20867b	85	..	59.8	+ 16 55	..	..	Ao	1	..	4413m
36	1800	59.6	- 4 16	9.2	9.2	Ao	3	..	44407b	86	..	59.8	+ 15 45	..	..	G5	1	..	4413m
37	1799	59.6	- 4 22	9.1	10.3	K5	1	..	44407b	87	1457	59.8	+ 15 29	9.6	10.2	Go	2	..	4413m
38	1725	59.6	- 8 58	8.4	8.4	Ao	6	0,2	24340b	88	1544	59.8	+ 13 46	8.1	8.1	Ao	7	0,4	4413m
39	1766	59.6	- 11 15	9.1	9.0	B5	3	..	24340b	89	1545	59.8	+ 13 20	9.9	10.3	F5	2	..	4413m
40	1629	59.6	- 15 11	8.35	8.23	B5	5	..	46170b	90	1437	59.8	+ 11 2	9.6	9.7	A2	2	..	15139b
41	1659	59.6	- 18 33	10.1	10.2	A3	1	..	15402b	91	1675	59.8	+ 1 44	9.3	9.3	Ao	3	1,3	20867b
42	4786	59.6	- 24 10	9.0	8.1	B9	5	..	12631b	92	1534	59.8	- 1 40	8.8	10.0	K5	1	..	20867b
43	4784	59.6	- 24 22	11.2	9.2	Ao	2	..	12631b	93	1719	59.8	- 3 44	9.6	9.6	Ao	3	..	44407b
44	4785	59.6	- 24 56	7.01	6.7	B3	5	..	42935b	94	1918	59.8	- 6 42	8.9	8.9	B9	4	1,2	44407b
45	3788	59.6	- 26 34	10.4	9.3	Ao	3	..	24433b	95	1726	59.8	- 8 18	7.41	8.41	Ko	2	..	38609i
46	3779	59.6	- 28 41	9.2	8.3	B9	7	..	24433b	96	1769	59.8	- 11 40	10.1	10.1	Ao	2	..	24340b
47	3325	59.6	- 36 22	9.0	11.1	Ma	1	..	20670b	97	1803	59.8	- 14 4	9.6	9.9	Fo	2	..	46170b
48	2530	59.6	- 50 17	7.74	8.1	Ao	2	..	8951b	98	3797	59.8	- 26 29	9.0	9.5	Ko	1	..	24433b
49	820	59.6	- 58 48	6.00	7.0	A5	..	2,10	56,123	99	3798	59.8	- 26 56	10.2	9.2	A5	4	..	24433b
50	682	59.6	- 65 43	9.3	10.1	G5	3	..	15223b	100	3587	59.8	- 27 17	10.7	9.3	A2	4	..	24433b

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6^h 59^m.8

H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.	H.D.	DM.	R.A. 1900	Dec. 1900	Ptm.	Ptg.	Sp.	Int.	Rem.	Pl. No.
1	3584	59.8	-27 55	10.9	9.8	Ao	1	..	24433b	23	1537	59.9	+ 2 49	9.1	9.5	F5	2	..	39867b
2	3451	59.8	-33 26	7.97	8.9	K5	4	..	2067ob	24	1677	59.9	+ 1 33	8.7	9.3	Go	3	5,3	20867b
3	3298	59.8	-34 36	8.0	8.5	Ao	7	..	20534b	25	1535	59.9	- 1 38	8.9	9.0	A2	3	..	20867b
4	3310	59.8	-35 10	8.60	9.1	Ko	3	..	20534b	26	1720	59.9	- 3 47	9.6	9.6	Ao	1	..	44407b
5	2877	59.8	-40 13	7.50	7.8	A3	7	..	20671b	27	1919	59.9	- 6 18	9.6	9.7	A2	2	..	44407b
6	2572	59.8	-49 55	8.28	9.6	Ko	4	..	38414b	28	1729	59.9	- 8 42	7.9	7.7	B2	4	..	44407b
7	750	59.8	-60 38	8.9	9.4	F2	3	..	15176b	29	1827	59.9	-10 1	8.76	9.10	F2	2	..	24340b
8	1029	59.9	+60 26	8.9	9.0	A2	4	..	37526i	30	1661	59.9	-18 31	10.5	10.5	Ao	1	..	15402b
9	1180	59.9	+56 1	7.8	8.1	Fo	6	..	37526i	31	1672	59.9	-19 6	8.5	9.0	Ko	2	..	12631b
10	1388	59.9	+45 33	8.6	8.9	Fo	3	..	3750ri	32	1670	59.9	-19 24	8.9	8.9	Go	2	..	12631b
11	1591	59.9	+41 27	8.0	8.5	F8	2	..	3750ri	33	1727	59.9	-21 8	7.32	7.7	Ao	7	..	12631b
12	1791	59.9	+40 21	9.0	9.1	A3	2	E	3750ri	34	1728	59.9	-21 17	8.1	8.0	A2	6	..	12631b
13	1470	59.9	+33 29	10.0	11.0	Ko	2	..	37447i	35	3983	59.9	-25 58	10.9	9.8	Ko	2	..	24433b
14	1310	59.9	+28 21	7.8	7.9	A2	5	0,3	37478i	36	3799	59.9	-26 37	8.5	9.2	Ko	4	..	24433b
15	1382	59.9	+16 24	9.6	10.6	Ko	2	..	4413m	37	3800	59.9	-26 52	8.7	8.4	Ao	7	..	24433b
16	1558	59.9	+14 37	6.78	6.73	B8	8	1,10	36977i	38	3840	59.9	-29 14	8.7	8.6	Ao	5	..	24433b
17	1559	59.9	+14 5	10.3	10.8	F8	1	..	4413m	39	3856	59.9	-30 26	8.21	8.6	Ko	2	..	18926b
18	1547	59.9	+13 51	7.4	8.8	Ma	6	0,2 R	4413m	40	3616	59.9	-32 50	7.6	8.3	F5	3	..	18926b
19	1546	59.9	+13 28	8.4	9.4	Ko	5	..	4413m	41	3119	59.9	-38 29	11.4	10.5	A	1	..	2067ob
20	1404	59.9	+10 42	8.7	10.1	Ma	..	..	M	42	2896	59.9	-45 36	8.5	8.0	Ao	9	..	20858b
21	1588	59.9	+ 7 21	8.7	8.7	B9	2	..	37652i	43	2764	59.9	-47 11	9.8	10.0	F8	2	..	38414b
22	1536	59.9	+ 3 7	8.9	9.0	A5	1	..	37652i	44	1226	59.9	-53 55	8.1	8.6	G5	3	..	10697b

REMARKS.

25705. γ Reticuli.
 25725. V Eridani. Variable. Class III. Max. 8.4. Min. 9.3. Period, irregular. Line 4227.0 is very strong.
 25728. ϵ Reticuli. Read 5,10 R, for 5, R.
 25736. Line 4026.3 is very broad.
 25763. This star is C. DM. -60° 842, magn. 9.5, and is not contained in the Cape Photographic Durchmusterung.
 25794. The spectrum may belong to Class F5. H. D. 25806 follows 4°.4, south 1°.0. The two spectra are partly superposed.
 25823. The lines 4128.1 and 4131.1 are strong.
 25867. ψ Tauri.
 25878. The star, +52° 770, ptm. magn. 9.3, precedes 4°.1, north 1°.7. The spectrum appears to be of Class F. Its superposition makes the spectrum of H. D. 25878 difficult to classify.
 25880. The star +13° 643, ptm. magn. 9.1, follows 2°.3, north 0°.4. The superposition of its spectrum makes that of H. D. 25880 uncertain.
 25909. The region of shorter wave length is indistinct.
 25914. The lines are only slightly darker than other portions of the spectrum.
 25924. In the Cordoba Durchmusterung, the declination of this star is 1°.0 too far north.

25940. ϵ Persei. H β is bright and superposed on a wide dark band. The dark bands H γ and H δ are very wide and apparently double, which may be due to the superposition of a narrow bright line. The helium lines are very faint.
 25969. The spectrum is hazy and the class somewhat uncertain. The observation A5, on B 20264, residual 13, was rejected.
 26194. The star -71° 235, C.P.D., magn. 9.6, precedes 5°.0, south 0°.6. The spectrum is probably also of Class K.
 26234. SW Persei. Variable. Class uncertain. Max. 8.4. Min. 9.6. Period, 160^d. The period may be irregular.
 26308. This spectrum is faint. It may be nearer to Class Ma than to K5.
 26322. ρ Tauri.
 26376. This spectrum is probably composite. In the region between H δ and H γ it appears as if a spectrum of Class G were superposed.
 26574. σ^1 Eridani.
 26601. W Eridani. Variable. Class II. Max. 8.1. Min. <12.8. Period, 374^d. On a photograph taken January 28, 1897, the line H δ is bright.
 26612. δ Horologii.
 26630. μ Persei. Line 4077.9 is slightly more intense than in the spectrum of α Aurigae. Read 0,10 R, for 0, R.

26667. This is Gilliss 2351, and is not contained in the Cape Photographic Durchmusterung. The spectrum is very faint, and appears to be somewhat peculiar in the intensity of the dark bands.
- 26673.4. ϵ Persei. The spectrum is composite. The peculiar nature of the spectrum is clearly shown on photographs taken with both the 11-inch and 8-inch telescopes. The line K is only about 0.5 as wide as H, and the ultra-violet hydrogen lines are seen as in spectra of Class A or F. Read 0,10 R, for 0,R.
26735. The observation, F5, on I 38152, residual 10, was rejected.
26764. Read 2,10 R, for 2,R.
26814. The image is very faint.
26815. Probably of Class Ao. The star $+31^{\circ} 735$, ptm. magn. 9.8, follows $4^{\circ}.2$, north $1^{\circ}.4$. The spectrum, which is also of Class A, is partly superposed and makes it difficult to distinguish the faint lines of H. D. 26815.
26828. Very faint. Perhaps of Class K5.
26846. A Eridani.
26847. N. G. C. 1535. Gaseous nebula.
26894. The observation, A2, on I 37427, residual 8, was rejected. The spectrum is on the extreme edge of that plate and the focus is very poor.
26906. The line H β is bright. The faint lines are not well seen, perhaps due to the partial superposition of the spectrum of the star, H. D. 26907, which follows $2^{\circ}.6$, south $0^{\circ}.6$.
26912. μ Tauri.
26961. b Persei.
26963. Perhaps of Class K5.
26965. θ^3 Eridani. Parallax, $0^{\circ}.174$. Proper motion, $4^{\circ}.11$, $212^{\circ}.7$.
26967. α Horologii.
27045. ω Tauri.
- 27059,60. H. D. 27059 precedes H. D. 27060, 1° , south $0^{\circ}.3$.
27087. The spectrum may be nearer to Class A than to F.
- 27105,6. The lines are wide and both spectra are probably of Class A. The two stars are of approximately the same brightness, in the same approximate declination and 1° apart in right ascension.
27256. α Reticuli. A typical star of Class G5. See page 8.
27290. γ Doradus.
27309. The lines 4128.1 and 4131.1 are strong.
27371. γ Tauri.
27376. ν^4 Eridani. The star is a spectroscopic binary in which both components are bright. On a photograph taken November 16, 1896, the lines 4471.6 and 4481.3 appear to be double.
27382. ϕ Tauri.
27396. d Persei. Read 0,10 R, for 0,R.
27397. h Tauri.
27442. ϵ Reticuli.
27522. Perhaps of Class K2.
27538. S. D. $-23^{\circ} 51$, ptm. magn. 9.4, and C.D.M. $-22^{\circ} 1579$, ptm. magn. 10.2.
27628. The metallic lines are strong for this class.
27638. χ Tauri.
- 27639,40. The spectrum is composite. Bu. 2149, P. A. $169^{\circ}.2$, Dist. $1^{\circ}.74$, magnitudes 5.7 and 8.8. The band K is barely seen.
27697. δ Tauri.
27820. r Tauri. Read 2,10 R, for 2,R.
27846. The line H β is not clearly seen.
27861. ξ Eridani.
27876. The line K is not well defined. The spectrum may be nearer to Class A than to F.
27934. κ Tauri. Read 1,10 R, for 1,R.
27946. In H.A. 56, 77, classified A2, from C 16282. The spectrum is seen to better advantage on I 37589.
27966. The region of the line K is very indistinct.
27968. The hydrogen lines appear to be fainter than in Class Ao, but helium lines are not seen.
27986. Perhaps of Class K5.
28024. ν Tauri.
28028. d Eridani. H β , H γ , and H δ appear to be somewhat strong for this class. The observation, G5, on B 41080, residual 10, was rejected. The image is too dense on that plate to show the true nature of the spectrum.
28063. Probably of Class Ao.
28093. η Reticuli.
28100. π Tauri.
28112. The star $+58^{\circ} 748$, ptm. magn. 9.4, follows $1^{\circ}.0$, south $3^{\circ}.3$. The spectrum is superposed, and appears to be of Class G, although it is not certainly defined.
28168. RY Camelopardalis. Variable. Class III. Max. 9.5. Min. 10.5. Period, irregular.
28174. The spectrum appears to be slightly peculiar, as the end of greater wave length resembles that of Class K5.
28186. S. D. $-23^{\circ} 54$, ptm. magn. 9.2, and C.D.M. $-22^{\circ} 1628$, ptm. magn. 9.5.
28236. W Tauri. Variable. Class II. Max. 8.0. Min. 12.2. Period, 272^d.
28257. RV Camelopardalis. Variable. Class III. Max. 7.8. Min. 9.5. Period, probably irregular. On I 37435, the spectrum was classified Mb. It may change.
28270. The observation, F5, on I 37556, residual 13, was rejected. The spectrum is very indistinct on that plate.
28305. ϵ Tauri. The second observation was made on C 3082.
28307. θ^1 Tauri. The second observation was made on C 3082. The observation, G0, on I 37511, residual 10, was rejected. The spectrum is dense on that plate.
28309. R Tauri. Variable. Class II. Max. 8.0. Min. 14.0. Period, 324^d.5. On photographs taken December 1 and 4, 1904, the spectrum is of Class Mb, having the bright line H δ 5 times as strong as H γ .
28319. θ^2 Tauri. Read 0,10 R, for 0,R.
28353. The star $+45^{\circ} 942$, ptm. magn. 9.7, follows $3^{\circ}.9$, north $9^{\circ}.3$. The spectrum appears to be of Class A.
28355. b Tauri. Read 0,10 R, for 0,R.
28446. Bu. 2220. P. A. $306^{\circ}.7$, Dist. $10^{\circ}.24$, photometric magnitudes of components, 5.86 and 6.61. The lines are wide and the spectra are probably similar. Read 4,10 R, for 4,R.
28497. The line H β is a very narrow bright line superposed on a hazy dark band. The other hydrogen lines are dark, wide and hazy.

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28525. δ Mensae. The lines $H\beta$ and $H\delta$ are as strong as in Class G.
28572. The observation, Ko, on B 42916, residual 10, was rejected. The focus is poor on that plate in the region of greater wave length of this spectrum.
28704. m Persei.
28764. The region of the line K is indistinct.
28868. The hydrogen lines are narrow, and the other lines are very indistinct.
28873. δ Caeli. Read 0.10 R, for 0.2.
28910. ρ Tauri. Read 5.10 R, for 5.2.
28924. Bu. 2249. P. A. $126^{\circ}.1$, Dist. $23^{\circ}.47$, magnitudes 8.0 and 8.7. This is the spectrum of the north preceding component. A faint trace is seen of the spectrum of the fainter component, but it can not be classified.
- 28986.7. These spectra are superposed, and the classification is difficult. H. D. 28987 precedes $\sigma^6.6$, south $1'.4$, and appears to have more blue light than H. D. 28986.
29003. The observation, G5, on I 38920, residual 10, was rejected. The spectrum is very poor on that plate.
29064. The observation, Ko, on B 12685, residual 10, was rejected. The spectrum is too dense on that plate, which was taken with short dispersion.
29085. ν^1 Eridani.
- 29094.5. ϵ Persei. The spectrum is composite. It was classified Ko on I 37260, where the spectrum is near the edge and the peculiarities are not clearly seen.
29116. ν Mensae.
29139. α Tauri. Typical star of Class K5. See page 8 for description of the spectrum.
29140. d Tauri.
29147. T Camelopardalis. Variable. Class II. Max. 7.0. Min. 13.5. Period, 370^d. The spectrum resembles Class R, in having the strong absorption band 4640 to 4750, and other dark bands between $H\beta$ and $H\gamma$. It is very faint in the region of shorter wave length than $H\gamma$.
29154. The spectrum resembles those of Class R in having a very wide band of absorption in the region of 4227, and also in the bands between $H\beta$ and $H\gamma$. It may be intermediate between Classes K and R. See p. 10.
- 29172.3. Bu. 2269. P. A. $259^{\circ}.3$, Dist. $12^{\circ}.75$, combined magnitude, 6.32. On B 2298, the combined spectrum was classified Ao.
29190. The star $+71^{\circ} 269$, ptn. magn. 9.7, follows $5'$, north $1'.0$. The spectrum is superposed and is of Class A.
29248. ν Eridani.
29260. SZ Tauri. Variable. Class IV. Max. 7.2. Min. 7.7. Period, 3^d.1484.
29276. The region of the line K is very indistinct.
29291. ν^2 Eridani. Line 4226.9 is slightly less intense than in the typical star.
29305. α Doradus. Lines 4128.1 and 4131.1 are very strong. Very few other lines are seen except those of hydrogen, and the line K, which is as strong as in α Canis Majoris. See H.A. 28, 186, Remark 145.
29328. The star $-89^{\circ} 17$, C. P. D., magn. 9.9, follows $3'' 41'.5$, north $0'.7$. The spectrum is partly superposed and makes the classification of the spectrum of H. D. 29328 very uncertain.
29354. This spectrum is suspected to be composite. If so, the brighter component may be of Class A3, the fainter of Class G.
- 29355.6. Bu. 2285. P. A. $172^{\circ}.3$, Dist. $78^{\circ}.13$. On I 38063, the combined spectrum of these stars was classified Go.
29383. R Reticuli. Variable. Class II. Max. 7.1. Min. <13.5 . Period, 279^d.0. On a photograph taken September 17, 1897, the spectrum is of Class Mb, having $H\delta$ 1.3 as bright as $H\gamma$.
29384. X Camelopardalis. Variable. Max. 7.3. Min. 13.1. Period, 142^d.3. On a photograph taken September 22, 1914, the spectrum is of Class Mb, having $H\gamma$ and $H\delta$ nearly equally bright.
29388. c Tauri. Read 1.10 R, for 1.2.
29391. c Eridani.
29411. RX Tauri. Variable. Class II. Max. 10.2. Min. 13.2. Period, 324^d. On a photograph taken December 1, 1904, the spectrum is of Class Mb, having $H\delta$ twice as bright as $H\gamma$.
29441. The lines are wide and hazy. $H\beta$ is suspected to be bright.
29479. σ^1 Tauri.
29488. σ^2 Tauri.
29503. 1 Eridani. Read 5.10 R, for 5.2.
29631. Very faint. Perhaps of Class A5.
29666. In the distribution of light this spectrum resembles that of Class G5, but $H\delta$ is as strong as in Class F8.
29712. R Doradus. Variable. Class II. Max. 4.8. Min. 6.8. Period, 345^d.
29714. The star $+22^{\circ} 735$, ptn. magn. 8.5, follows $1'.6$, north $7'.6$. The spectrum is superposed and is probably of Class K2.
29723. The lines are hazy. Line 4026.3 is probably present.
29763. τ Tauri.
29844. R Caeli. Variable. Class II. Max. 7.2. Min. 14.0. Period, 398^d. On a photograph taken December 29, 1892, the spectrum is very faint, and has the bright lines $H\gamma$ and $H\delta$. The latter is twice as bright as $H\gamma$.
29875. α Caeli.
- 29889.90. H. D. 29889 precedes $\sigma^5.5$, north $1'.0$. On B 20647, the spectrum of the combined light was classified Fo.
29910. The observation, F5, on I 38088, residual 10, was rejected. The spectrum is too faint.
- 29961.2. The spectrum is composite.
29992. β Caeli.
- 30020.1. Bu. 2330. P. A. $316^{\circ}.3$, Dist. $9^{\circ}.05$. Chart photographs taken with the 8-inch telescope show the image elongated. Both spectra are probably alike.
30036. The star $+1^{\circ} 808$, ptn. magn. 10.5, precedes $3'.4$, south $0'.4$. The spectrum is superposed and appears to be also of Class F8.
30050. — Eridani. Variable. Class V. Max. 8.3. Min. 9.5. Period, 19^d.64.
30185. λ Pictoris. Read 0.10 R, for 0.2.
30211. μ Eridani.
30243. ST Camelopardalis. Variable. Class III. Max. 7.0. Min. 8.3. Period, irregular. Typical star of Class Nb. See page 11.

30293. The star $-50^{\circ} 1474$, ptm. magn. 10.1, precedes $5^{\circ}.5$, south $0'.7$. The combined light of these two stars, given in H.A. 54, 52, is 8.43.
30353. The spectrum has narrow lines, and shows very little absorption at the band G. In that respect it resembles the spectra of H. D. 18474 and of R Coronae Borealis.
30361. A line which appears to be 4352 is very strong.
30453. The spectrum is suspected to be composite. The metallic lines are too strong for Class A3. Classified Fo on I 37387.
30455. The line H δ is as strong as in Class F8.
30466. Lines 4128.1, and 4131.1 are very strong.
30478. κ Doradus. Read 1,10 R, for 1, R.
30551. R Pictoris. Variable. Class II. Max. 7.6. Min. 10.0. Period, 165^d. On a photograph taken October 23, 1909, the spectrum is of Class Ma, having H γ and H δ bright. H δ is 0.8 as bright as H γ .
30590. The star $+4^{\circ} 754$, ptm. magn. 8.0, precedes $0'.8$, south $0'.7$. The spectrum is superposed and may belong to Class K. Owing to this superposition, the spectrum of H. D. 30590 is uncertain.
30593. T Caeli. Variable. Class III. Max. 8.7. Min. 10.3. Period, probably irregular.
30608. ζ Caeli.
30612. μ Mensae.
30642. T Doradus. Variable. Class II. Max. 8.8. Min. <11.5. Period, unknown. On a photograph taken November 14, 1895, the spectrum is of Class Ma, having H γ and H δ bright. H δ is 5 times as bright as H γ .
30652. π^3 Orionis.
30709. Perhaps of Class A3.
30739. π^3 Orionis.
30755. TT Tauri. Variable. Class III. Max. 8.1. Min. 8.8. Period, probably irregular.
30780. i Tauri. Read 5,10 R, for 5, R.
30836. π^4 Orionis. A typical star of Class B3. See page 6.
30868. V Tauri. Variable. Class II. Max. 8.3. Min. 13.6. Period, 170^d.1. On a photograph taken November 23, 1897, the spectrum is of Class Ma, having H γ and H δ equally bright.
30896. The lines are very broad.
30959. σ^1 Orionis.
31086. Announced by Espin to be of Class N. Perhaps there is a faint adjacent star of Class N which does not appear on the Harvard photographs.
31109. ω Eridani. The lines are broad.
- 31203.4. ι Pictoris. Innes 4^b 58. P. A. $58^{\circ}.4$, Dist. $12'.1$, combined photometric magnitude, 5.19.
31205. The lines are sharply defined. Lines 4077.9, 4128.1, and 4131.1 are of well marked intensity.
31237. π^5 Orionis.
- 31244.5. The spectrum is composite. Innes 4^b 59. P. A. $117^{\circ}.2$, Dist. $0^{\circ}.48$, magn. 7.6 and 7.7.
31253. The spectrum is somewhat peculiar. In the distribution of light, it resembles Class G5.
31255. Probably of Class Ao. The exact class is uncertain because the region of the line K is superposed on the spectrum of H. D. 31254.
31266. The spectrum is suspected to be composite. The line K appears to be fainter than H. A star having spectrum of Class A may be superposed on the spectrum of Class G.
31267. The star, $+23^{\circ} 767$, ptm. magn. 9.5, follows $1'.1$, north $13'.1$. The spectrum is partly superposed and appears to be of Class K.
31283. γ Orionis. Read 1,10 R, for 1, R.
31295. π^1 Orionis.
31327. The line H δ is suspected to be bright.
31351. This object is No. 2105 in the Index Catalogue, and is not identical with N. G. C. 1698. Gaseous nebula.
31398. ι Aurigae.
31407. The lines are probably narrow. The line K is as strong as 4026.3.
31419. The observation, F2, on I 38136, residual 10, was rejected. The spectrum is very faint and indistinct on that plate.
31421. σ^3 Orionis. Read 5,10 R, for 5, R.
31444. R Eridani. Considered by Gould to be variable from magnitude 5.4 to 6.0, but the variation has not been confirmed.
31497. Perhaps of Class A5.
31512. b Eridani. The star $-5^{\circ} 1093$, ptm. magn. 9.3, follows $4'.5$, north $0'.2$. The spectrum is of Class A.
31592. k Tauri.
31599. U Leporis. Variable. Class IV. Max. 9.0. Min. 10.0. Period, 0^d.58144.
31606. N. G. C. 1714. Gaseous nebula.
31647. Read 0,10 R, for 0, R.
31673. N. G. C. 1722. Gaseous nebula.
31711. Perhaps of Class F5.
31758. The spectrum may belong to Class B8.
31763. The class of spectrum is uncertain, and may be nearer to Class G than to K.
31767. π^6 Orionis.
31784. This star precedes $+15^{\circ} 712$, $0^m.2$ and is south $6'$. It is at least 0.8 magn. brighter photographically than the Durchmusterung star. Photographs taken with the 16-inch Metcalf Telescope and a yellow screen, show that the Durchmusterung star is not redder than this object.
31798. R Orionis. Variable. Class II. Max. 8.7. Min. 13.5. Period, 378^d.5. The line H δ is bright. The spectrum shows strong dark bands and may belong to Class R.
31837. This star is S.D. $-23^{\circ} 64$, ptm. magn. 8.3, and C.D.M. $-22^{\circ} 1917$, ptm. magn. 8.9.
31855. The spectrum is suspected to be composite.
31892. The lines appear to be narrow.
31894. The lines are probably narrow.
31910. The lines are narrow and strong lines are seen as in the spectrum of δ Canis Majoris. Read 0,10 R, for 0, R.
31913. RX Aurigae. Variable. Class IV. Max. 7.2. Min. 8.1. Period, 11^d.6263.
31916. The lines are indistinct and the class is not very well defined.
31947. N. G. C. 1743. Gaseous nebula. The magnitude in the C. P. D. is 9.6, which becomes 10.4 on the photometric scale.

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31964. ϵ Aurigae. Variable. Max. 3.4. Min. 4.1. The variation is suspected to be of the Algol type, in period of 27.14 years. Spectroscopic binary of Class A. The lines are very narrow, and strong lines are present, many of which resemble those in the spectrum of δ Canis Majoris. For further description, see H.A. 28, 31.
31996. R Leporis. Variable. Class II. Max. 6.1. Min. 9.7. Period, 436^d.1. The spectrum is peculiar, and consists mainly of light of greater wave length than H β . It resembles that of VX Andromedae, H. D. 1546.
32014. N. G. C. 1748. Gaseous nebula.
32034. The spectrum appears very hazy and no lines are clearly seen. It may belong to Class Oe5.
32045. S Eridani. Considered at Cordoba to be variable, from magn. 4.8 to 5.7. The variation has not been confirmed.
- 32068.9. ζ Aurigae. The spectrum is composite. See H.A. 28, 99, Remark 147. Read 0,10 R, for 0,R.
32125. See H. A. 76, 30.
32147. Parallax, 0".134. Proper Motion, 1".25, 151".4.
32185. The lines are somewhat narrow.
32249. ψ Eridani.
32256. This object appears to agree with N. G. C. 1763. The continuous spectrum is strong and several bright lines are distinctly seen, two of which are H β and H γ . The spectrum may belong to the P Cygni Class.
32257. Probably of Class Oa.
32279. Index Catalogue, 2115. Gaseous nebula.
32301. ι Tauri.
32318. The star +23° 814, ptm. magn. 9.8, precedes 2".1, south 9'.9. The lines H δ and H ϵ of this spectrum are identified among the lines of H. D. 32318.
32340. In N. G. C. 1769. The spectrum is very faint, and contains bright lines.
32343. The lines H δ , H γ , H δ , and H ϵ are bright and are superposed on hazy, dark bands. The bright lines are slightly displaced towards the edge of greater wave length of the dark bands.
32354. The star -30° 2143, ptm. magn. 10.4, follows 0".2, south 1'.0. The spectrum is probably also of Class G.
32364. Index Catalogue, 2117. Gaseous nebula.
32407. Perhaps of Class A5.
32440. η Mensae.
32481. The observation, A3, on I 37388, residual 8, was rejected. The spectrum is very near the edge of that plate. The helium lines 4388.1 and 4471.6 are clearly seen on I 38213.
32503. This star is S. D. -23° 65, magn. 6.0 and C. DM. -22° 1960, magn. 6.1.
32549. Read 4, 10 R, for 4,R.
32569. The star -31° 2166, ptm. magn. 10.9, precedes 3".2, south 2'.0. The spectrum is superposed and makes that of H. D. 32569 somewhat indistinct.
32630. η Aurigae.
32650. The lines 4128.1 and 4131.1 are strong.
32701. Jonckheere's gaseous nebula, No. 320. Not contained in Dreyer's New General Catalogue. The spectrum is too faint to show any lines except the principal nebular lines at 4959 and 5007.
32736. W Orionis. Variable. Class III. Max. 5.9. Min. 7.7. Period, irregular.
32743. η^1 Pictoris.
32763. This spectrum contains bright hydrogen lines, but the image is too faint and indistinct to determine its true nature.
32803. T Leporis. Variable. Class II. Max. 7.5. Min. 12.3. Period, 366^d.5. On photographs taken October 24, 1894 and October 24, 1895, the line H δ is very bright. The spectrum is faint in the region of greater wave length than 4227, but it appears to be of Class M.
32831. γ Caeli.
- 32835.6. The spectrum is composite.
32840. This is the same star as -2° 1130 ptm. magn. 8.4.
32841. Perhaps of Class K5.
32887. ϵ Leporis.
32906. The spectrum is near the edge of the second plate.
32923. m Tauri.
32952. On B 17409, taken with long dispersion, this spectrum was classified G5. The spectrum is very faint on that plate and partly superposed on that of H. D. 32964.
32977. l Tauri.
32991. The lines H β and H γ are bright, but they are only slightly more intense than adjacent portions of the continuous spectrum.
33016. TX Aurigae. Variable. Class III. Max. 9.0. Min. 9.5. Period, irregular.
33035. The lines 4128.1 and 4131.1 are strong.
33042. η^2 Pictoris. Read 5, 10 R, for 5,R.
33054. i Orionis. The spectrum is composite. Bu. 2535. P. A. 170".3, Dist. 0".90, magn. 5.9 and 6.7. The spectrum shows the line K to be fainter than H, and no more intense than in Class A3, while the metallic lines are as strong as in Class Fo. The spectrum of the fainter component may belong to Class A2 or A3. The peculiar nature of the spectrum is seen to better advantage on photographs taken with the 8-inch Telescope than with the 11-inch Draper. Two lines should be given to this star in Table I.
33088. TT Aurigae. Variable. Class V. β Lyrae type. Max. 8.0. Min. 9.4. Period, 1^d.332705.
33105. The star +37° 1061, ptm. magn. 9.4, follows 1'.4, south 4'.2. The spectrum is partly superposed and also appears to be of Class G5.
33111. β Eridani. The lines are wide.
33152. The line H β is not seen as a dark line and is suspected to be bright. The other lines are hazy.
33169. This star precedes H. D. 33185, 7" and is south 0'.4. It is at least 1.5 magn. fainter.
33238. The spectrum is somewhat peculiar in the intensities of H γ and H δ , which are as strong as in Class Go.
33254. h Orionis.
33262. ζ Doradus. Read 2,10 R, for 2,R.
33285. β Mensae.
33294. N. G. C. 1818. A globular cluster in the Large Magellanic Cloud. Faint traces of dark lines are seen.
33328. λ Eridani.
33331. Line 4026.3 is fairly well marked.

33335. Bu. 2553. P. A. $165^{\circ}.6$, Dist. $26^{\circ}.35$, magn. 9 and 10. The lines $H\gamma$ and $H\delta$ of the fainter star are superposed on the spectrum of the brighter star.
33357. SX Aurigae. Variable. Class V. Max. 7.4. Min. 8.0. Period, $1^d.53186$.
33365. The class of spectrum was recorded Fo on I 38161, which is certainly wrong. A second observation of this plate shows that the spectrum is Ko.
33424. The region of the line K is indistinct.
33452. — Columbae. Variable. Class III. Max. 8.8. Min. 9.7. Period may be irregular.
33535. This star is C. DM. $-22^{\circ} 2042$, and is not contained in the Southern Bonn Durchmusterung.
33540. $H\beta$, $H\gamma$, and $H\delta$ are bright. Other lines are not seen distinctly.
33579. The spectrum is almost continuous. $H\delta$ and $H\epsilon$ are, however, dark, although faint. It may belong to Class Oe5.
33641. μ Aurigae.
33793. Z. C. $5^h 243$. Parallax, $0^{\circ}.319$. Proper Motion, $8^{\circ}.71$, $131^{\circ}.0$.
33802. ϵ Leporis.
33844. The observation, K5, on B 20322, residual 10, was rejected. The spectrum is faint on that plate, which was taken with long dispersion.
33856. ρ Orionis. Read 0,10 R, for 0,R.
33861. UZ Aurigae. Variable. Class III. Max. 9.3. Min. 10.1. Period may be irregular.
33877. UX Aurigae. Variable. Class II? Max. 8.1. Min. 8.7. Period, $102^d.7$.
- 33883.4. The spectrum is composite. Bu. 2588. P. A. $279^{\circ}.8$, Dist. $0^{\circ}.63$, magn. 6.5 and 6.7.
33893. Y Pictoris. Variable. Max. 9.0. Min. 10.0. Class and period unknown.
33894. S Pictoris. Variable. Class II. Max. 8.7. Min. <13.9 . Period, $428^d.5$. On photographs taken November 5 and 20, 1894, and April 20, 1897, the spectrum is of Class Mb, having $H\delta$ 4 times as bright as $H\gamma$.
33904. μ Leporis. The spectrum resembles that of α Andromedae. Several helium lines are present, together with well marked solar lines. See H. D. 358.
33937. The region of the line K is indistinct.
33949. ϵ Leporis. Read 0,10 R, for 0,R.
33988. The lines are indistinct.
33990. Perhaps of Class A2.
34018. The metallic lines are strong for this class. Lines 4077.9, 4128.1, and 4131.1 are well marked.
34019. R Aurigae. Variable. Class II. Max. 6.5. Min. 13.8. Period, $458^d.6$. On a photograph taken August 15, 1890, the spectrum is of Class Mc, having $H\delta$ 7 times as bright as $H\gamma$.
34026. N. G. C. 1850. In the Large Magellanic Cloud. Traces of dark hydrogen lines are seen with a strong nebulosity superposed.
34029. α Aurigae. The lines are hazy. This star is a spectroscopic binary and the haziness of the lines may be due to the spectrum of the companion. See H.A. 28, 97, Remark 92, for notes on certain lines.
34039. No bright lines are seen.
34050. Parallax, $0^{\circ}.105$.
34060. Line 4026.3 is present but very faint.
34077. The star, $+35^{\circ} 1026$, ptm. magn. 9.0, precedes $1^{\circ}.9$, north, $4^{\circ}.0$. The spectrum is partly superposed and appears to belong to some division of Class B.
34078. Line 4685.9 is as strong as in Class Oe5, and the spectrum appears to be intermediate between Oe5 and Bo. See H.A. 56, 105, Remark 39, for description of these peculiarities.
34085. β Orionis. The lines are narrow and very sharply defined. See H.A. 28, 84, Remark 112, also Table XXV, page 238, of that volume.
34108. N. G. C. 1855. A cluster of a few stars and small nebulae in the Large Magellanic Cloud. No bright lines are seen.
34172. ξ Mensae. The observation Go, on B 20557, residual 10, was rejected. The spectrum is too dense on that plate which was taken with short dispersion.
34187. This spectrum is very indistinct. Bright bands are seen on a hazy spectrum and it appears to be some division of Class O.
34243. N. G. C. 1851. The dark bands H and K are seen, and the general distribution of light is similar to that of the solar spectrum. A general haziness is superposed. The photometric magn. is 8.10.
34251. The line K is strong for this class.
- 34318.9. The spectrum is composite. Classified F5 on B 18649, where the violet end is not well seen.
34333. The second observation was made on C 18347.
34351. The star $+20^{\circ} 910$, ptm. magn. 8.7, follows $1^{\circ}.3$, south $8^{\circ}.0$. The spectrum is partly superposed and appears to be of Class K.
34411. λ Aurigae. Parallax, $0^{\circ}.102$.
34444. Perhaps of Class A5. The lines are broad and indistinct.
34448. T Pictoris. Variable. Class II. Max. 8.4. Min. 12.4. Period, 200^d . On a photograph taken October 18, 1897, the spectrum is of Class Ma, having $H\gamma$ and $H\delta$ equally bright.
34452. The lines are narrow and sharply defined. Lines 4128.1 and 4131.1 are strong. The spectrum was classified B3 on I 37365 with the remark that silicon lines are strong, but the image is too dense on that plate to show the true nature of the spectrum.
34503. τ Orionis.
34525. The lines are very indistinct, so that the spectrum appears to be nearly continuous.
- 34533.4. The spectrum is composite. Bu. 2637. P. A., $180^{\circ}.5$, Dist. $23^{\circ}.34$, magn. 6.3 and 8.3. On I 37391, classified A2, with the remark, "G band seen. Perhaps composite."
34538. The observation, Go, on B 18649, residual 10, was rejected. The image is rather dense on that plate.
34559. n Tauri.
34574. N. G. C. 1866. In the Large Magellanic Cloud. No bright lines are seen.
34578. The metallic lines are very sharp, and resemble those in the spectrum of ϵ Aurigae. Read 0,10 R, for 0,R.
34642. \circ Columbae.
34649. θ Doradus.

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34656. The second observation was made on C 18342.
34664. The spectrum belongs to the P Cygni class. $H\beta$, $H\gamma$, and $H\delta$ are bright and superposed on an apparently continuous spectrum.
34679. N. G. C. 1874. A cluster of small stars and nebulae, including N. G. C. 1876, 1877, and 1880. No bright lines are seen.
34680. The lines appear to be broad.
34719. Lines 4128.1 and 4131.1 are the strongest except those of hydrogen.
34740. The lines 4077.9, and 4128.1, and 4131.1 are strong.
- 34749.50. Bu. 2662. P. A. $273^{\circ}.2$, Dist. $10^{\circ}.36$, magn. 7.0 and 7.4. The lines appear double. Both spectra may be alike.
34759. ρ Aurigae.
- 34797.8. Bu. 2666. P. A. $18^{\circ}.0$, Dist. $39^{\circ}.12$. The lines are indistinct, owing to the superposition of the spectra. H. D. 34797 follows $\sigma^{\circ}.8$, north $0^{\circ}.6$.
34816. λ Leporis.
34825. Perhaps of Class B8.
34842. UV Aurigae. Variable. Class II. Max. 7.9. Min. 10.1. Period, unknown. On a photograph taken October 12, 1910, the lines $H\beta$ and $H\gamma$ are nearly equally bright, and superposed on a faint spectrum which has a dark absorption band between $H\beta$ and $H\gamma$, and which may belong to Class R.
34863. ν Leporis.
34897. T Columbae. Variable. Class II. Max. 7.5. Min. 11.8. Period, 225^d. On photographs taken October 29 and November 11, 1910, the spectrum is of Class Mb, having the lines $H\gamma$, $H\delta$, $H\epsilon$, and $H\eta$ bright. The intensities are 10, 10, 2, and 1, respectively.
34921. The line $H\beta$ is bright. The spectrum, in other respects, is nearly continuous. The dark lines $H\gamma$ and $H\delta$ are very faint.
34923. The star $+34^{\circ} 1018$, ptm. magn. 10.2, follows $1^{\circ}.8$, north $3^{\circ}.0$. The spectrum is superposed and the lines $H\gamma$ and $H\delta$ are identified among those of H. D. 34923.
34924. Perhaps of Class B8.
34925. The star, $+33^{\circ} 1021$, ptm. magn. 10.0, follows $2^{\circ}.0$, south $0^{\circ}.9$. The spectrum is superposed and is perhaps also of Class B3.
34968. The line K is as strong as in Class A2, and the helium line 4026.3 is present.
34976. Perhaps of Class A5.
35039. σ Orionis.
35072. ζ Pictoris.
35148. Helium lines may be present. The spectrum is almost completely superposed on that of H. D. 35149. The latter star precedes $1^{\circ}.2$, south $0^{\circ}.7$.
35149. m Orionis.
35155. The spectrum resembles that of π^1 Gruis in the region from $H\beta$ to $H\gamma$. See H.A. 56, 219, Remark 10.
- 35162.3. The spectrum is composite. Innes 5^A 27. P. A. $101^{\circ}.1$, Dist. $3^{\circ}.05$, combined magn. 5.14.
35165. The spectrum is very peculiar and probably composite. The helium lines are wide and almost double. Other lines are present as 4233.8 and 4481.3, which are very narrow. The spectrum resembles that of η Centauri in combination of wide helium and narrow solar lines. See H.A. 28, 183, Remark 93, for a description of the lines present in this spectrum.
35172. The spectrum is nearly all superposed on that of H. D. 35173. It may be of Class B8.
35186. σ Aurigae. The second observation was made on C 18342.
35231. N. G. C. 1903. A hazy spectrum is visible, in which $H\delta$, $H\epsilon$, and $H\zeta$ are distinguishable as dark lines.
35238. The star $+31^{\circ} 953$, ptm. magn. 10.0, precedes $3^{\circ}.8$, north $2^{\circ}.0$. The spectrum is partly superposed and is of Class A.
35295. The star $+34^{\circ} 1030$, ptm. magn. 8.6, precedes $\sigma^{\circ}.5$, north $0^{\circ}.7$. The spectrum is superposed and is probably also of Class K.
35342. N. G. C. 1910. In the Large Magellanic Cloud. No lines are seen.
35343. S Doradus. Variable. Class III. Max. 8.2. Min. 9.8. Period, irregular. This star is situated on the edge of N. G. C. 1910, and has a strong continuous spectrum with $H\beta$, $H\gamma$, and $H\delta$ bright. It resembles the spectrum of P Cygni when seen with the same dispersion, and also the spectrum of η Carinae on the early photographs.
35345. The line $H\beta$ is bright. The spectrum is probably of Class B0. Perhaps due to faintness of the image, the dark lines are barely seen.
35347. This spectrum appears to be nearly continuous. It may belong to Class B. Traces of bright lines are suspected.
35369. ϵ Orionis. Read 5,10 R, for 5,R.
35410. p Orionis.
35411. η Orionis.
35439. $H\beta$ is a well marked bright line nearly centrally superposed on a faint dark band. $H\gamma$ and $H\delta$ are very wide and hazy, with only a trace of a bright line superposed. All lines are wide.
35450. This spectrum is probably composite. Several faint lines are seen which appear to be due to a spectrum of Class G.
35468. γ Orionis. Typical star of Class B2. See description on page 6.
35497. β Tauri.
35512. N. G. C. 1904. Messier 79. No lines are seen.
35533. Lines 4128.1 and 4131.1 and a few solar lines appear to be somewhat stronger than normal.
35556. S Aurigae. Variable. Class III. Max. 9.3. Min. <12 . Period, irregular.
35600. The lines appear to be narrow.
35618. The star $+40^{\circ} 1298$, ptm. magn. 9.4, follows $7^{\circ}.1$, north $0^{\circ}.2$. The spectrum is superposed and appears to be also of Class A.
35620. ϕ Aurigae.
35652. This spectrum and that of H. D. 35669 are partly superposed. The latter star follows $1^{\circ}.4$, south $6^{\circ}.8$.
35669. See H. D. 35652.
35670. The classification is difficult owing to the superposition of the spectra of several adjacent faint stars.
35708. σ Tauri. Read 0,10 R, for 0,R.
35715. ψ Orionis.

35814. N. G. C. 1935, also I. C. 2126. Bright lines are present but they are not well defined. $H\beta$ and $H\gamma$ appear to be seen, but 5007 is not present.
35860. θ Pictoris.
35861. N. G. C. 1936. Gaseous nebula.
35914. I. C. 418. Planetary nebula. Photometric magn., 9.7. For description of spectrum, see page 5, also H.A. 76, 20.
35942. The star $+33^\circ 1064$, ptm. magn. 9.1, follows $1^\circ.0$, south $11'.2$. The spectrum is superposed and appears to be also of Class G.
35957. The lines appear to be double. A star about 0.5 magn. fainter, follows 1° , south $0'.5$.
35959. The spectrum appears to be peculiar, and is probably composite. Strong solar lines are seen.
36003. Parallax, $0''.104$.
36072. The spectrum is superposed on that of H. D. 36073. The latter star precedes $1^\circ.0$, south $1'.3$.
36079. β Leporis. The hydrogen lines and 4077.9 are strong for this class. In the distribution of light the spectrum is more nearly of Class G5.
36090. S Orionis. Variable. Class II. Max. 8.0. Min. 14.3. Period, 413^d. On photographs taken February 27, and March 4, 1897, the spectrum is of Class Mc having $H\gamma$ and $H\delta$ bright. $H\delta$ is 4 times as bright as $H\gamma$.
36162. Read $0,10 R$, for $0, R$.
36189. λ Doradus.
36250. The star $+3^\circ 937$, ptm. magn. 10.0, precedes $5^\circ.2$, north $5'.1$. The spectrum is superposed and is of Class A.
36267. A Orionis.
36270. Perhaps of Class F5.
36287. The spectrum is very faint. It may be of Class Ma.
36294. Nova, T Aurigae. See H.A. 76, 24 and 35. The light curve of this new star was nearly constant from January 1, to March 1, 1892, and although the outburst occurred at least 55 days before the spectrum was photographed, bright and dark hydrogen lines were then present as in Nova Persei, No. 2, on February 25, 1901, three days after the outburst. From September 2, 1892, to December, 1893, the spectrum was that of a gaseous nebula.
36301. N. G. C. 1949. Gaseous nebula.
36328. Perhaps of Class A5.
36351. n^1 Orionis. Read $0,10 R$, for $0, R$.
36371. χ Aurigae.
36395. Parallax, $0''.178$. Proper motion $2''.23$, $161^\circ.7$.
36441. The star $+26^\circ 839$, ptm. magn. 9.4, precedes $5^\circ.1$, north $2'.3$. The spectrum is partly superposed and appears to be of some division of Class B.
- 36485.6. δ Orionis. The lines are broad. Chart plates taken with the Bruce 24-inch Telescope show that the fainter component is probably too faint to affect the spectrum of the brighter star. See H.A. 28, 176, Remark 19, for notes on the intensities of certain lines in this spectrum.
36512. ν Orionis.
36523. The spectrum is faint and indistinct on the second plate.
36576. $H\beta$ is a well marked bright line superposed on a faint dark band. $H\gamma$ appears to be double, consisting of two equal dark portions. The central line is of the same intensity as adjacent portions of the continuous spectrum. $H\delta$ and $H\epsilon$ are very wide. The helium lines are not wider than normal.
36597. ϵ Columbae.
36602. RT Orionis. Variable. Class III. Max. 8.7. Min. 10.6. Period probably irregular.
36604. The star $+2^\circ 996$, ptm. magn. 9.7, follows $3^\circ.9$, south $1'.8$. The spectrum is superposed and is also of Class A.
36653. Read $0,10 R$, for $0, R$.
36673. α Leporis.
36700. C. DM. $-23^\circ 2835 = C. P. D. -23^\circ 818$ and 819 . The latter follows $0^\circ.5$, north $0'.4$. The observation refers to the combined light. The magnitude of each star in the Cape Photographic Durchmusterung is 10.0, which becomes 11.1 reduced to the International Scale. The combined photographic magnitude is given in column 6.
36777. n^2 Orionis. Read $2,10 R$, for $2, R$.
36811. This star is also B. D. $-2^\circ 1294$, ptm. magn. 8.2.
36822. ϕ^1 Orionis. Read $3,10 R$, for $3, R$.
36834. The star $+36^\circ 1194$, ptm. magn. 9.0, precedes $1^\circ.9$, north $1'.5$. The spectrum is partly superposed and is of Class Ko or K5.
- 36861.2. λ Orionis. Bu. 2821. P. A. $44^\circ.0$, Dist. $4''.44$, combined photometric magn., 3.49.
36917. Variability suspected between the limits 8.0 and 8.7.
- 36947.8. The spectrum is composite. On I 37391, the spectrum was classified F8, with the remark, "May be composite."
- 36959.60. Bu. 2833. P. A. $222^\circ.9$, Dist. $35''.68$, combined photometric magn. 4.28.
36972. S Camelopardalis. Variable. Class II. Max. 7.8. Min. 10.8. Period, 325^d.5.
36980. This star is also S. D. $-2^\circ 1303$, ptm. magn. 9.1.
36982. The lines are barely seen. Perhaps of Class B8.
37018. c Orionis.
- 37020-23. θ^1 Orionis. Quadruple star. Bu. 2837. For stars A and B, P. A. $32^\circ.3$, Dist. $8''.74$. For stars C and D, P. A. $61^\circ.3$, Dist. $13''.35$. Combined magnitude of all, 4.85. The spectra of the four stars are probably similar. The second observation was made on C 1664.
37024. N. G. C. 1976. The Great Nebula of Orion.
- 37041.2. θ^2 Orionis. Bu. 2839. P. A. $92^\circ.7$, Dist. $52''.27$, Combined magn. 4.90.
37043. ι Orionis.
37059. The class is uncertain. The spectrum is partly superposed on that of H. D. 37058.
37062. The lines are obscured by the superposition of nebulosity.
37076. The star $-1^\circ 966$, ptm. magn. 8.9, follows $1^\circ.5$, north $0'.1$. The spectrum appears to be of Class A.
37128. ϵ Orionis. Typical star of Class Bo. See page 6.
37156. The class is very uncertain.
37160. ϕ^2 Orionis. Line 4226.9 has relatively great intensity.
37202. ζ Tauri. On a photograph taken with the 24-inch Reflector on a plate stained with pinacyanol, the line

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- H α is distinctly bright. H β has been found bright at the Lowell Observatory. It is not bright on the Harvard plates. It may be variable.
37268. The star $+34^{\circ} 1125$, ptm. magn. 8.7, precedes $0^{\circ}.1$, south $6'.2$. The spectrum is partly superposed and appears to be of Class K.
37305. The star $-8^{\circ} 1177$, ptm. magn. 9.0, precedes $0^{\circ}.5$, north $2'.2$. The spectrum is superposed and appears to be of Class G or K.
37318. The lines are barely seen.
37350. β Doradus. The lines are narrow and the spectrum resembles that of δ Canis Majoris in the intensity of some lines. See H.A. 28, 188, Remark 179.
37394. Parallax, $0''.116$.
37398. The star $-3^{\circ} 1160$, ptm. magn. 10.3, precedes $1^{\circ}.0$, south $1'.6$. The superposition of this spectrum makes that of H. D. 37398 uncertain.
37417. Perhaps of Class A3.
37430. ν^1 Columbae.
37468. σ Orionis. The lines are wide. Lines 4121.0 and 4685.9 are very strong. Line 4116.4 is faint. See H.A. 28, 94, Remark 9.
37490. ω Orionis. No bright lines are seen on a photograph taken with the 11-inch Telescope on January 31, 1906. All the lines are wide. H α and H β were found to be bright by Merrill on photographs taken September 23 and October 14, 1912.
37495. ν^2 Columbae.
37501. The observation G ϕ , on B 38371, residual 10, was rejected. The spectrum is too dense on that plate, which was taken with short dispersion.
37507. δ Orionis.
37520. The spectrum is partly superposed on that of H. D. 37538. The intensity of the two spectra combined was estimated 2.
37538. See H. D. 37520.
37550. In H.A. 54, 62, the ptm. magn. 9.10 refers to the combined light of this star and $-35^{\circ} 2411$. The latter precedes $4^{\circ}.4$, north $1'.0$, ptm. magn. 10.4.
37581. This star is C. DM. $-22^{\circ} 2363$, and is not contained in the Southern Bonn Durchmusterung.
- 37614.5. The spectrum is composite. The two components are probably nearly equal in brightness.
37641. S. D. $-2^{\circ} 1333$, ptm. magn. 8.6, also refers to the same object.
37645. SZ Aurigae. Variable. Class II. Max. 9.5. Min. <12 . Period, 452 d . On a photograph taken February 10, 1891, the line H δ is bright. The image is too faint to show the character of the spectrum but it appears to be of Class M.
- 37646.7. Both spectra may belong to Class A ϕ . All lines except those of hydrogen are confused by the superposition of the two spectra.
37650. Perhaps of Class B8.
37724. U Aurigae. Variable. Class II. Max. 8.3. Min. 13.4. Period, 405 d .5. On a photograph taken March 21, 1892, the spectrum, although very faint, appears to be of Class Mb, and has the line H δ 5 times as bright as H γ .
37737. The line H β is suspected to be bright.
- 37742.3. ζ Orionis. Bu. 2902. Stars A and B. P. A. 156 $^{\circ}$.3, Dist. 2 $''$.43, combined magn. 1.91. The lines are wide. See H.A. 28, 176, Remark 19, for notes concerning the spectrum.
37763. γ Mensae.
37795. α Columbae. The line H β is bright but has only very slight intensity, when compared with the continuous spectrum. The other lines are dark.
37819. The spectrum is near the edge of the second plate.
37836. The spectrum is of the P Cygni class. H β and H γ are bright and superposed on a strong spectrum which appears to be nearly continuous.
37882. N. G. C. 2022. Planetary nebula. Photometric magn. 10.09.
- 37947.8. C. DM. $-24^{\circ} 3319$ = C. P. D. $-24^{\circ} 1038$ and 1039. The latter star follows $2^{\circ}.0$, north $0'.1$.
37975. Parallax, $0''.145$.
37978. The star $+26^{\circ} 922$, ptm. magn. 8.4, follows $1^{\circ}.5$, north $5'.8$. The spectrum is partly superposed and is of Class A.
37984. δ Orionis.
38010. The line H β is bright. H γ and H δ are barely seen and may be bright.
38057. The observation A2, on B 9061, residual 10, was rejected. The plate is of long dispersion and the spectrum is not well defined.
38089. Read 0,10-, for 0,R.
38104. ϕ Aurigae.
38191. The lines are barely seen. Perhaps of Class Oe.
38213. This spectrum is probably intermediate between Classes K5 and Ma.
38218. TU Tauri. Variable. Class III. Max. 8.7. Min. 9.5. Period, irregular.
38262. ST Tauri. Variable. Class IV. Max. 8.5. Min. 9.4. Period, unknown.
38268. N. G. C. 2070. β Doradus. Gaseous nebula.
38307. Y Tauri. Variable. Class III. Max. 6.9. Min. 8.9. Period, irregular.
38318. N. G. C. 2075. Gaseous nebula.
38344. Very faint. Probably of Class Oa.
38393. γ Leporis.
38402. The lines are somewhat narrow.
38416. N. G. C. 2077. Gaseous nebula. C. P. D. $-69^{\circ} 475$, magn. 9.9, refers to this object and H. D. 38436 together.
38436. N. G. C. 2080. Gaseous nebula. See H. D. 38416.
38437. N. G. C. 2079. Gaseous nebula.
38472. The bright bands are indistinct. Probably of Class Oa.
38521. — Aurigae. Variable. This star follows $+44^{\circ} 1288$ 8', north $1'.8$. The nature and limits of the variation are not determined. The spectrum contains little or no blue light and resembles that of VX Andromedae, H. D. 1546.
38563. N. G. C. 2067. The spectrum shows no bright lines.
38572. — Aurigae. Variable. Class III. Max. 9.0. Min. 9.3. Period, irregular.
- 38573.4. The spectrum is composite. Bu. 2961. P. A. 90 $^{\circ}$.6, Dist. 1 $''$.43, magn. 7.5 and 10.0. The brighter component may be a close double.

38591. The star $-3^{\circ} 1192$, ptm. magn. 9.1, precedes $2^{\circ}.0$, north $0^{\circ}.4$. The spectrum is superposed and is of Class K.
38602. ϵ Mensae.
- 38613,4. The combined spectrum of these two stars resembles a composite spectrum.
38656. τ Aurigae.
38658. The star $+28^{\circ} 901$, ptm. magn. 9.8, precedes $3^{\circ}.8$, north $12^{\circ}.1$. The spectrum appears to be of Class G, and the superposition makes that of H. D. 38658 indistinct at the violet end.
38666. μ Columbae.
38670. The star $+20^{\circ} 1106$, ptm. magn. 8.6, follows $2^{\circ}.0$, south $1^{\circ}.5$. The spectrum is superposed and is of Class A.
38678. ζ Leporis.
38762. N. G. C. 2100. No lines are distinctly seen.
38771. κ Orionis. The lines are well defined and somewhat narrow.
- 38787,8. H. D. 38787 follows $1^{\circ}.4$, north $0^{\circ}.6$. The spectra are probably similar.
38877. Perhaps of Class B8.
38944. ν Aurigae. The line $H\delta$ is strong for this class.
39003. ν Aurigae.
39014. δ Doradus. Read 0,10 R, for 0,R.
39050. The spectrum is suspected to be composite.
39060. β Pictoris. The lines are wide.
39091. π Mensae. Proper motion, $1^{\circ}.28$, $10^{\circ}.8$. Read 5,10 R, for 5,R.
- 39118,9. The spectrum is composite.
39183. N. G. C. 2099. Messier 37. No bright lines are seen.
39194. Proper motion, $1^{\circ}.29$, $343^{\circ}.1$.
39220. Line 4026.3 is slightly stronger than normal for this class. Read 0,10 R, for 0,R.
39283. ξ Aurigae. Read 2,10 R, for 2,R.
39317. Lines 4128.1, and 4131.1 are somewhat stronger than normal. Read 0,10 R, for 0,R.
39324. R Columbae. Variable. Class II. Max. 8.0. Min. 12.5. Period, 323^d. On a photograph taken March 18, 1893, the spectrum is of Class Ma, having $H\gamma$ and $H\delta$ equally bright. On November 27, 1894, a faint spectrum of some division of Class M is seen, in which $H\delta$ is 3 times as bright as $H\gamma$. The star is much fainter on the latter plate than on the former.
39364. δ Leporis. Line 4226.9 is somewhat stronger than normal.
39425. β Columbae.
39449. Perhaps of Class A5.
39523. γ Pictoris.
- 39547,8. The spectrum is composite.
39569. The spectrum is suspected to be composite.
39587. χ^1 Orionis. Read 0,10R, for 0,R.
39626. The class is very uncertain.
39680. The classification is difficult, owing to the superposition of the spectrum of H. D. 39700.
39724. Lines 4077.9, 4128.1, 4131.1 are somewhat stronger than normal.
39739. Perhaps of Class A5.
39741. V Camelopardalis. Variable. Class II. Max. 8.2. Min. 13.5. Period, 207^d. On a photograph taken November 1, 1904, the spectrum is of Class Mb, having $H\delta$ bright.
- 39758,9. H. D. 39758 precedes $0^{\circ}.19$, south $4^{\circ}.8$.
39764. λ Columbae.
39783. TW Aurigae. Variable. Class III. Max. 8.2. Min. 9.3. Period unknown, perhaps irregular.
39801. α Orionis. A typical star for Class Ma. See page 9. The lines of hydrogen are strong and 4226.9 is weak for this class. See H.A. 28, 189, Remark 211. Probably variable to the extent of 0.5 magn. in a very irregular period.
39810. λ Mensae.
- 39811,2. The spectrum is indistinct and hazy. H. D. 39811 follows $1^{\circ}.0$, north $0^{\circ}.1$ and is shown on chart plates to be about 0.3 magn. brighter than H. D. 39812. It is suspected that the former star has a spectrum of Class G or G5, the latter of Class A to F.
39816. U Orionis. Variable. Class II. Max. 5.5. Min. 12.5. Period, 373^d.9. On a photograph taken January 6, 1886, the spectrum is of Class Ma having the lines $H\gamma$, $H\delta$, $H\epsilon$, and $H\eta$ bright. The relative intensities are 10, 50, 1, and 1, respectively. Numerous other photographs have been obtained of this spectrum.
39844. ϵ Doradus.
39847. The best photograph shows the presence of some faint solar lines. It is probable that a fainter spectrum of Class G is superposed.
39866. The lines are somewhat narrow.
39887. The class is uncertain.
39906. Perhaps of Class B8.
- 39963,4. The spectrum is composite.
39970. The line K is strong for this class.
39983. — Orionis. Variable. Class III. Range of variation and period unknown.
39994. The star $-21^{\circ} 1300$ precedes $1^{\circ}.7$, and is in the same declination. No trace of this star is seen on chart plates B 20906 and A 4280. Its magnitude in the Southern Bonn Durchmusterung is 9.5. It is not contained in the Cape Photographic Durchmusterung.
40035. δ Aurigae. Read 5,10 R, for 5,R.
40062. The metallic lines are well marked and somewhat narrow.
40103. Very faint. The spectrum may be nearer to Class Ma than to K5.
40136. η Leporis.
40176. ξ Columbae. Read 0,10 R, for 0,R.
40183. β Aurigae. A spectroscopic binary having the two components nearly equally bright. The lines are double in a period of 3^d.9600244.
40239. π Aurigae.
40248. σ Columbae.
40297. The hydrogen lines are very narrow. Other lines, if present, are not seen. The spectrum of H. D. 40315 is partly superposed.
40312. θ Aurigae. The lines 4128.1 and 4131.1 are very strong. The line K is very faint. See H.A. 28, 96, Remarks 69 and 70.

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- 40369,70. The spectrum is composite. Bu. 3078. P. A. $242^{\circ}.2$, Dist. $0^{\circ}.66$, magn. 6.0, and 7.8. On I 37568, the combined spectrum was classified F5.
40448. The star $-15^{\circ} 1231$, ptm. magn. 9.1, follows $0^{\circ}.5$, north $0^{\circ}.9$. The spectrum is superposed and is also of Class A.
40494. γ Columbae.
40535. The lines are somewhat narrow. In H.A. 56, 81, classified A5 from C 15157, on which the spectrum is rather faint.
40536. The lines are somewhat narrow.
40589. The lines are very narrow.
40611. The spectrum is suspected to be composite.
40652. Lines 4128.1 and 4131.1 are well marked.
40808. η Columbae.
40857. R Octantis. Variable. Class II. Max. 7.3. Min. 12.2. Period, 408^d. On a photograph taken September 3, 1891, the spectrum is of Class Mc, having H δ five times as bright as H γ . On June 2, 1899, the line H δ was twice as bright as H γ .
40882. The star $-21^{\circ} 1054$, ptm. magn. 9.0, precedes $0^{\circ}.4$, south $0^{\circ}.2$. The spectrum is superposed and makes the lines of H. D. 40882 wide and hazy.
40893. The dark lines are barely seen. The spectrum is probably of Class B0, although it may be of Class Oe5.
- 40920.1. H. D. 40920 follows $0^{\circ}.8$, north $1^{\circ}.0$. The combined spectrum is very indistinct.
40932. μ Orionis. Read 0,10 R, for 0,R.
40953. κ Mensae.
40980. The star $+26^{\circ} 1044$, ptm. magn. 9.1, precedes $0^{\circ}.9$, south $9^{\circ}.1$. The spectrum is partly superposed and is of Class A.
41006. The class is uncertain owing to the superposition of the spectrum of H. D. 40953. The latter star precedes $18^{\circ}.0$, north $3^{\circ}.9$.
41040. Read 0,10-, for 0,R.
41069. The lines are somewhat narrow.
41117. χ^2 Orionis. The lines are narrow.
41126. The spectrum is very faint and the class is uncertain. It may be nearer to Class F than to A.
41134. Perhaps of Class F5.
41163. The lines are wide or double. The star $+30^{\circ} 1097$, ptm. magn. 9.8, precedes $1^{\circ}.5$, north $0^{\circ}.2$. The spectrum is superposed and is probably also of Class A.
- 41229,30. C. DM. $-41^{\circ} 2183 =$ C. P. D. $-41^{\circ} 872$ and 873 , magn. 8.7 and 8.7. The former star precedes $2^{\circ}.5$, south $0^{\circ}.2$.
41302. The star $+80^{\circ} 194$, ptm. magn. 8.8, precedes 6° , north $1^{\circ}.8$. The spectrum appears to be of Class G0 or G5.
41335. The line H β is bright. The other hydrogen lines are very wide.
41496. The metallic lines are well marked for this class.
41617. The star $+11^{\circ} 1027$, ptm. magn. 9.2, precedes $1^{\circ}.7$, south $2^{\circ}.8$. The spectrum is partly superposed and appears to be of Class A.
41695. θ Leporis. The lines are slightly wide and hazy.
41698. S Leporis. Variable. Class III. Max. 6.5. Min. 8.0. Period, irregular.
41707. The lines are broad.
- 41724,5. The spectrum is composite. The magnitudes of the two components are probably nearly equal.
41753. ν Orionis.
41775. The spectrum is faint and indistinct, and the class is uncertain.
41846. This spectrum is slightly peculiar and may be composite. Several faint lines are seen which may belong to a spectrum of Class G.
41870. SS Geminorum. Variable. Class IV. Max. 8.2. Min. 9.3. Period, 44^d.6.
41909. The star $+14^{\circ} 1161$, ptm. magn. 9.9, follows $0^{\circ}.3$, north $0^{\circ}.4$. The spectrum is superposed and makes the class of H. D. 41909 uncertain.
41974. The spectrum is slightly hazy, which may be due to the superposition of the spectrum of the star, C. P. D. $-22^{\circ} 1067$, ptm. magn. 10.7, which follows $0^{\circ}.5$, south $0^{\circ}.2$.
41997. The dark lines show slight contrast to other portions of the spectrum.
42078. π^1 Columbae.
- 42126,7. Bu. 3181. P. A. $355^{\circ}.2$, Dist. $7^{\circ}.63$, combined magn. 5.64. The lines are broad and almost double. The spectra are probably similar.
42140. The spectrum may be intermediate between Classes K5 and Ma.
42167. θ Columbae.
42212. X Aurigae. Variable. Max. 8.1. Min. 13. Period, 162^d.6. On photographs taken March 10, 1905 and February 25, 1909, the spectrum is of Class Ma, having H γ and H δ equally bright.
42272. TU Geminorum. Variable. Class III. Max. 7.4. Min. 8.3. Period, irregular.
42303. π^2 Columbae.
42311. RR Aurigae. Variable. Class II. Max. 9.0. Min. 13.0. Period, 311^d. On a photograph taken February 10, 1904, the spectrum is of Class Ma, having H δ 1.5 as bright as H γ .
42313. The star $+30^{\circ} 1142$, ptm. magn. 8.4, follows $1^{\circ}.0$, north $1^{\circ}.2$. The spectrum is partly superposed and makes that of H. D. 42313 indistinct.
42315. The spectrum is very faint, and the class is uncertain.
42319. The lines are indistinct and the spectrum may belong to Class B8.
42322. The star $-15^{\circ} 1284$, ptm. magn. 10.2, follows $1^{\circ}.5$, south $1^{\circ}.1$. The spectrum is superposed and is probably also of Class A.
42379. H β is not clearly seen, and the helium lines are indistinct.
42475. TV Geminorum. Variable. Class III. Max. 7.0. Min. 7.8. Period, irregular.
42514. The line K appears narrow for this class. The star $-9^{\circ} 1351$, ptm. magn. 9.1, precedes $1^{\circ}.0$, and is in the same declination. Perhaps the superposition of this spectrum causes the observed peculiarity in that of H. D. 42514.
42525. η^1 Doradus.
42545. ρ^1 Orionis.
42560. ξ Orionis. Read 0,10 R, for 0,R.

42616. Lines 4128.1 and 4131.1 are strong.
42662. Perhaps of Class A5.
42665. The star $-42^{\circ} 2368$, ptm. magn. 10.9, follows $2^{\circ} 8$, south $0^{\circ} 8$. The spectrum is superposed and appears to be of Class G.
42675. The lines 4128.1 and 4131.1 are strong.
42738. This spectrum was photographed with the 24-inch Reflector on plates stained with pinacyanol.
42806. SU Geminorum. Variable. Class II. Max. 10. Min. <12.5 . Period, unknown.
42927. The helium lines are not well shown on the second plate.
42933. δ Pictoris. The lines are broad.
42942. The observation, G5, on I 38205, residual 10, was rejected. The spectrum is too faint on that plate.
42954. The spectrum is slightly peculiar in the increased intensity of lines 4077.9, 4128.1, and 4131.1.
42995. η Geminorum. Variable. Class III. Max. 3.3. Min. 4.2. Period perhaps 233^d, or irregular.
43010. The class is probably Ko. The spectrum is partly superposed on that of H. D. 42987, which precedes $1^{\circ} 0$, north $1^{\circ} 0$.
43029. The star $-16^{\circ} 1400$, ptm. magn. 9.2, precedes $2^{\circ} 4$, south $1^{\circ} 3$. The spectrum is partly superposed and is probably of Class K.
43039. κ Aurigae. Read 0,10 R, for 0,R.
43080. The star $+16^{\circ} 1054$, ptm. magn. 9.1, precedes $1^{\circ} 0$, north $2^{\circ} 8$. The spectrum, which is probably of Class A5, is superposed and makes the exact classification of H. D. 43080 difficult.
43107. ν Doradus.
43109. This spectrum is faint and the class is very uncertain.
43121. H. D. 43106 precedes $6^{\circ} 6$, south $4^{\circ} 0$. The spectrum is partly superposed and makes that of H. D. 43121 indistinct.
43153. f° Orionis. Read 0,10 R, for 0,R.
43158. The lines H γ and H δ are narrow, and the region of the line K is not clearly seen. The class is very doubtful.
43232. γ Monocerotis.
43246. The line 4077.9 is strong.
43258. The line K appears to be too faint for this class.
43261. The second observation was made on C 18353.
43354. VW Aurigae. Variable. Class III. Max. 9.6. Min. 10.3. Period, irregular.
43381. The star $+39^{\circ} 1577$, ptm. magn. 8.8, follows $1^{\circ} 1$, north $6^{\circ} 7$. The spectrum is partly superposed and is of Class K.
43382. The lines of hydrogen are narrow.
43384. The second observation was made on C 18353.
43386. k Orionis. Read 0,10 R, for 0,R.
43455. η° Doradus. Read 5,10 R, for 5,R.
43478. The lines 4077.9, 4128.1, and 4131.1 are strong.
43525. l Orionis.
43561. Strong lines are present whose intensities may resemble those in α Cygni, although the lines of hydrogen do not appear to be narrow.
43591. The lines are indistinct and the spectrum probably belongs to Class B8.
43614. The spectrum is faint and the class is uncertain, owing to the superposition of the spectrum of H. D. 43595. The latter star precedes $6^{\circ} 5$, north $4^{\circ} 4$.
43728. The star $+3^{\circ} 1191$, ptm. magn. 9.6, precedes $7^{\circ} 9$, north $2^{\circ} 5$. The spectrum is superposed and is of Class A.
43740. The second observation was made on C 18353.
43753. The classification was difficult as the lines are indistinct.
43785. κ Columbae.
43834. α Mensae.
43836. The second observation was made on C 18353.
43907. The star $+22^{\circ} 1281$, ptm. magn. 9.0, follows $0^{\circ} 7$, north $11^{\circ} 2$, is partly superposed and appears to be of some division of Class B.
43962. This star was classified K5 on I 37397, with the remark, "Faint, perhaps Ma." An examination of several photographs taken with small dispersion showed it to be certainly of Class Ma.
43966. The second observation was made on C 18353.
44011. This spectrum is suspected to be composite. The line K is too faint for Class F.
44034. Perhaps of Class F5.
44050. The star $+25^{\circ} 1222$, ptm. magn. 9.4, precedes $4^{\circ} 2$, south $0^{\circ} 1$. The spectrum is superposed and is probably of Class B9.
44074. The hydrogen lines are very narrow. The spectrum may be of Class B8.
44086. Perhaps of Class A5. The spectrum is partly superposed on that of H. D. 44087. The latter star follows $2^{\circ} 0$, south $3^{\circ} 9$.
44106. This spectrum is suspected to be composite. The intensities of H γ and H δ are the same as in Class F5.
44127. Perhaps of Class B8.
44144. The star $-24^{\circ} 3914$, ptm. magn. 8.5, precedes $0^{\circ} 1$, north $1^{\circ} 7$. The combined light of this star and H. D. 44144 is 7.17 in H.A. 54, 70.
44214. H. D. 44213 precedes $1^{\circ} 70$, south $14^{\circ} 6$, and the Durchmusterung magnitude may refer to the combined light of these two stars.
44229. The lines 4077.9, 4128.1, and 4131.1 are somewhat stronger than normal.
44320. $-$ Monocerotis. Variable. Class IV. Max. 8.6. Min. 9.6. Period unknown.
44351. The lines are narrow. The spectrum may be of Class A2.
44388. V Aurigae. Variable. Class II. Max. 8.3. Min. <12.2 . Period, 352^d.
44402. ζ Canis Majoris. The lines appear to be much wider on a photograph taken June 6, 1889, with the 11-inch Draper Telescope than on those taken November 16, 1894 and December 1, 1896 with the 13-inch Boyden. Read 0,10 R, for 0,R.
44458. The line H β is bright. See H.A. 56, 106, Remark 57.
44478. μ Geminorum. The spectrum is somewhat peculiar. The lines H γ and H δ are stronger than normal for this class. Line 4226.9 is very strong.
44519. Index Catalogue 2165. The magnitude is 9.6 in the Southern Bonn Durchmusterung, which becomes 10.3 on the photometric scale.

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44534. The star $+73^{\circ} 334$, ptm. magn. 8.9, follows 2° , south $2^{\circ}.0$. The spectrum is superposed and appears to be of Class A.
44537. ψ^1 Aurigae.
44544. This star was photographed with the 24-inch Reflector on plates stained with pinacyanol. There is no light of shorter wave length than $H\beta$. The region of greater wave length than $H\beta$ resembles that of Class Mc.
44550. This star is C. P. D. $-19^{\circ} 1206$. C. P. D. $-20^{\circ} 1280$, magn. 9.4, follows $1^{\circ}.1$, south $4^{\circ}.0$. The spectrum is partly superposed and makes that of H. D. 44550 uncertain.
44624. This star is C. P. D. $-35^{\circ} 908$. C. P. D. $-35^{\circ} 909$, ptm. magn. 8.1, follows $1^{\circ}.5$, south $0^{\circ}.2$. The spectrum is superposed and appears to be also of Class A5. In H.A. 54, 70, the magnitude 8.20 refers to both of these stars.
44637. The line $H\beta$ is not clearly seen and is suspected to be bright.
44639. V Monocerotis. Variable. Class II. Max. 6.5. Min. 13.2. Period, 332^d.o. The spectrum is of Class Mc, having $H\gamma$ and $H\delta$ bright. On several photographs examined, the intensity of $H\delta$ varies from 1.4 to 7 times that of $H\gamma$.
44674. The dark lines are so faint that this spectrum is difficult to classify. It may belong to Class Oe5.
44738. Lines 4128.1 and 4131.1 are strong.
44743. β Canis Majoris. A typical star of Class B1. See page 6. Parallax, $0^{\circ}.163$.
44762. δ Columbae. Read 5,10 R, for 5,R.
- 44963.4. H. D. 44963 precedes $0^{\circ}.99$, south $9^{\circ}.0$. The hydrogen lines are very broad, and it is probable that both stars have spectrum of Class Ao. The following star is 0.1 magn. brighter on chart plates than the preceding.
44984. This star is probably variable with range of about 0.4 magnitude.
44990. T Monocerotis. Variable. Class IV. Max. 5.7. Min. 6.8. Period, 27^d.0122. The lines are somewhat narrow. $H\beta$ and $H\gamma$ are strong for Class G5. Line 4077.9 is strong.
45043. Gaseous nebula. The spectrum is faint and only the bright lines 4959 and 5007 are seen. The class is Pd or Pe.
- 45044.5. The spectrum is composite.
45087. This spectrum is like that of VX Andromedae, H. D. 1546. It has no blue light.
45160. On B 18485, the line $H\delta$ in this spectrum appears to be stronger than the other hydrogen lines. The spectrum was therefore suspected to be composite.
45204. The star $+65^{\circ} 530$, ptm. magn. 8.4, precedes $2^{\circ}.0$, north $6^{\circ}.1$. The spectrum is partly superposed and appears to be of Class K5.
45229. ν Pictoris.
45340. The observation, F5, on I 38196, residual 10, was rejected. The definition is poor on that plate.
45348. α Carinae. Ptm. magn. -0.86 . Ptg. magn. -0.58 . The lines are narrow. A typical star of Class Fo. See page 7.
45352. The star $+20^{\circ} 1426$, ptm. magn. 8.0, precedes $0^{\circ}.9$, south $0^{\circ}.5$. The spectrum is probably also of Class K.
45412. RT Aurigae. Variable. Class IV. Max. 5.0. Min. 5.6. Period, 3^d.7282.
45510. Perhaps of Class F5.
45525. The star $-37^{\circ} 2823$, ptm. magn. 10.9, follows $1^{\circ}.3$, north $1^{\circ}.7$. The spectrum appears to be also of Class G.
45542. ν Geminorum. $H\alpha$ was found by Merrill to be bright in this spectrum on photographs taken November 12 and December 3, 1915.
45572. G Puppis.
45660. π^1 Doradus.
45677. The line $H\beta$ is bright. $H\gamma$ is very hazy and may have a centre which is slightly brighter than other portions of the spectrum.
45719. The star $-52^{\circ} 926$, ptm. magn. 8.8, follows $3^{\circ}.5$, north $1^{\circ}.3$. The spectrum is of Class G5 or Ko.
- 45725,6,7. β Monocerotis. Bu. 3402. Stars A, B, and C. On B 10638, the spectrum of BC is slightly separated on the following side from that of star A, and appears to be of some division of Class B. In the spectrum of the combined light, a bright band accompanies the dark $H\beta$, and changes its position with respect to the dark portion of the line. H.A. 28, 104, Remark 170. In 1895 Campbell found that $H\alpha$ was bright in the preceding and following components of this triple star. Merrill obtained the following results in 1912. In the preceding and brightest component, $H\alpha$ is bright, and $H\beta$ is partially reversed, and varies in position. In the spectrum of the intermediate component, $H\alpha$ does not appear bright, while $H\beta$ and the helium lines are faint and dark. The spectrum of the following component shows $H\alpha$ and $H\beta$ to be bright.
45788. The combined magnitude of this star and H. D. 45789 is given in H.A. 54, 72, as 8.08. H. D. 45788 precedes $6^{\circ}.8$, north $1^{\circ}.6$.
45789. See H. D. 45788. The second observation was made on C 16176.
45813. λ Canis Majoris. Read 0,10 R, for 0,R.
45827. The lines 4128.1 and 4131.1 are strong.
45828. Perhaps of Class B8.
45901. Perhaps of Class Oe5. The spectrum is nearly continuous from the end of greater wave length to the line $H\delta$.
45903. The lines $H\gamma$ and $H\delta$ appear slightly fainter than normal. The spectrum may be composite.
45931. The star $-0^{\circ} 1315$, ptm. magn. 8.9, follows $7^{\circ}.1$, south $0^{\circ}.6$. The spectrum is superposed and is probably of Class A.
45968. RT Camelopardalis. Variable. Class II. Max. 9.7. Min. <12.5 . Period, 370^d. On a photograph taken September 30, 1907, the spectrum is of Class Mc having $H\delta$ 5 times as bright as $H\gamma$.
46039. The magnitude of the combined light of this star and H. D. 46040, as given in H.A. 54, 72, is 7.35.
46060. The lines are indistinct. The star $-9^{\circ} 1497$, ptm. magn. 9.5, precedes $1^{\circ}.3$, north $0^{\circ}.8$.
46075. The line $H\beta$ appears to be bright on the edge of shorter wave length on I 37579, but this appearance was not confirmed on I 38200, the second plate.
46076. Very faint. The spectrum may be nearer to Class Ma than to K5.

46081. The star $-25^{\circ} 3292$, ptm. magn. 9.3, precedes $1^{\circ}.7$, north $0^{\circ}.9$. The spectrum is superposed and makes that of H. D. 46081 somewhat hazy.
46106. Classified B2 on I 38168, a plate taken with long dispersion and on which the spectrum of H. D. 46107 is partly superposed.
46116. π^3 Doradus.
46136. Bu. 3435. P. A. $210^{\circ}.4$, Dist. $19^{\circ}.94$. Photometric magnitudes, 7.24 and 7.78. The spectrum is very indistinct and hazy, which is due to the two components. The two spectra are probably similar.
46210. The lines are narrow.
- 46220.1. The lines are wide and the spectra of both stars are probably of Class A0.
46300. Read 2.10 R, for 2.2. The lines are very narrow and sharply defined and resemble in intensity those in the spectrum of η Leonis.
46320. The solar lines are strong.
46321. RV Aurigae. Variable. Class III. Max. 9.2. Min. 9.6. Period, irregular.
46328. ξ^1 Canis Majoris. Read 1.10 R, for 1.2.
- 46349.50. The spectrum is composite.
46390. The spectrum may be of Class B8.
46391. Z Monocerotis. Variable. Class III. Max. 9.0. Min. 10.1. Period, irregular.
46407. The spectrum has a wide band of absorption near 4227, and somewhat resembles that of $-19^{\circ} 3634$, R. A. $13^{\text{h}} 1^{\text{m}}.1$, Dec. $-19^{\circ} 31'$, which is apparently intermediate between Classes K and R, as described on page 10.
46421. TU Aurigae. Variable. Class III. Max. 8.5. Min. 9.4. Period unknown, perhaps irregular. The spectrum may change from Ma to Mc.
46592. Perhaps of Class A5.
46595. W Geminorum. Variable. Class IV. Max. 6.7. Min. 7.5. Period, $7^{\text{d}}.91603$. The lines are narrow, and strong lines are present as in the spectrum of δ Cephei.
46687. UU Aurigae. Variable. Class III. Max. 6.2. Min. 6.7. Period, irregular.
46711. The dark lines are very faint.
46847. The dark lines are very faint.
46860. μ Pictoris. Read 1.10 R, for 1.2.
46913. Perhaps of Class A5.
46933. ξ^2 Canis Majoris. Read 0.10 R, for 0.2.
47100. ψ^1 Aurigae. Read 0.10 R, for 0.2.
47105. γ Geminorum.
47129. H β is not seen as a distinct dark line and appears to be slightly bright. The lines are narrow. Line 4200.3 is strong.
47138. ν^1 Canis Majoris.
47160. The observation, F8, on I 37595 was rejected. A second examination shows that the spectrum is B9.
47174. ψ^2 Aurigae.
47205. ν^2 Canis Majoris. Read 0.10 R, for 0.2.
47280. C. P. D. $-22^{\circ} 1347$. The star, C. P. D. $-22^{\circ} 1348$, magn. 9.0, follows $0^{\circ}.5$, north $0^{\circ}.2$. The spectrum is not seen. On chart plates this star is at least 0.4 magn. fainter than H. D. 47280.
47299. In the Southern Bonn Durchmusterung, for minutes of declination, read 33 for 23. The position on the charts of the Durchmusterung is correct.
47306. N Carinae. The line K is strong for Class A0, and the helium line 4026.3 is distinctly visible. See H.A. 28, 185, Remark 126.
47359. This spectrum was classified "Continuous" on I 38168. The helium lines are indistinct. The class may be Oe5.
47396. — Geminorum. Variable. The range is about one magnitude, but other facts concerning the variation are unknown. The spectrum was photographed on plates stained with pinacyanol, and resembles that of VX Andromedae, H. D. 1546, but contains a little more blue light.
47410. The observation, F5, on B 13007, residual 10, was rejected. On second examination, the spectrum was classified G0 on that plate.
47442. ν^3 Canis Majoris.
47484. The observation, F0, on B 12671, residual 8, was rejected. The spectrum is too faint on that plate.
47523. — Aurigae. Variable. Class II. Max. 12. Min. <14 . Period, 250^{d} . The spectrum was photographed with the 16-inch Metcalf Telescope on April 22, 1914. It is of Class Ma, having the lines H γ and H δ equally bright.
- 47579.80. The spectrum is composite. In Table I, only one photometric magnitude should be given.
47597. This is C. P. D. $-22^{\circ} 1366$. The star $-22^{\circ} 1365$, ptm. magn. 9.1, precedes $0^{\circ}.0$, north $0^{\circ}.2$. The spectrum is superposed and appears to be also of Class A0. A chart plate taken November 19, 1902, shows the latter to be at least 0.8 magn. fainter than H. D. 47597, although both are given in the Cape Photographic Durchmusterung as magn. 8.8.
47670. ν Puppis. The lines are broad.
47676. The spectrum is very faint, but it probably belongs to Class Ma.
47839. S Monocerotis. Bu. 3542. P. A. $216^{\circ}.6$, Dist. $2^{\circ}.92$, magn. 6.0 and 8.8. Also a spectroscopic binary. The lines are wide.
47883. — Geminorum. Variable. Class III. Max. 8.6. Min. 8.8. Period, irregular.
47914. ψ^4 Aurigae.
47924. This is the spectrum of A. G. C. 8218. A. G. C. 8217, magn. 9.2, precedes $0^{\circ}.86$, north $16^{\circ}.4$. The combined magnitude given in H.A. 54, 74, is 7.74.
47929. S Lyncis. Variable. Class II. Max. 9.4. Min. 14. Period, $298^{\text{d}}.6$. On photographs taken April 6, 1905 and February 24, 1906, the spectrum is of Class Mb, having the line H δ very bright.
47973. The star $-48^{\circ} 2416$, ptm. magn. 7.8, precedes $1^{\circ}.5$, north $0^{\circ}.1$. The spectrum is superposed and appears to be of Class A, as the hydrogen lines H δ , H ϵ , and H ζ are seen among the lines of H. D. 47973.
48029. This spectrum is difficult to classify, as the lines are indistinct.
- 48060.1. H. D. 48060 precedes $0^{\circ}.13$, north $11^{\circ}.4$. Chart plates show that the two stars are of equal brightness photographically.

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48268. The helium line 4026.3 is distinctly seen.
48328. Nova Geminorum, No. 1. The first spectrum was photographed on March 25, 1903, 13 days after its appearance on a chart plate, and 25 days after a photograph of the region showed it to be invisible and fainter than magn. 12. Band 4650 was the strongest bright band, and $H\gamma$, including 4363, was next in order of brightness. On March 29, band 5007 was probably present. On April 25, 4363 exceeded the band 4650 in brightness, and was still the brightest band on September 2, 1903. See H.A. 76, 24 and 36.
48329. ϵ Geminorum. The absorption in the region of 4227 is strong.
48411. The star $+39^{\circ} 1728$, ptm. magn. 9.4, precedes $5^{\circ}.3$, north $0^{\circ}.4$. The magn. 8.97 in H.A. 54, 75, refers to the combined light of these two stars.
48448. The lines are indistinct and the spectrum may be nearer to Class A than to F.
48450. This star is suspected of variability.
48455. The lines appear to be somewhat narrow, and the spectrum may belong to Class B8. It is partly superposed on that of H. D. 48437. The latter star precedes $4^{\circ}.0$, south $1^{\circ}.2$.
48505. — Carinae. Variable. Max. 8.8. Min. 9.5. Class and period unknown.
48544. The star $-48^{\circ} 2447$, ptm. magn. 10.5, follows $1^{\circ}.0$, south $0^{\circ}.6$. The spectrum is superposed and may be of Class A, since the lines $H\delta$ and $H\epsilon$ are seen among the lines in the spectrum of H. D. 48544.
48549. The line K is strong for this class. Perhaps the lines are narrow.
48615. Perhaps of Class A5.
48663. Perhaps of Class B8. The hydrogen lines are very narrow.
48664. The spectrum was photographed on a plate stained with pinacyanol. The spectrum shows little or no blue light and resembles that of VX Andromedae, H. D. 1546.
48675. RV Puppis. Class II. Max. 9.1. Min. <11.5 . Period, 180^d. On a photograph taken January 8, 1895, the spectrum shows the line $H\gamma$ to be 3 times as bright as $H\delta$. The portion between $H\delta$ and $H\gamma$ is brighter than the region of shorter wave length. It is uncertain whether the spectrum is of Class M or R.
48682. ψ^5 Aurigae.
48691. $H\beta$ is not distinctly seen as a dark line, and may be bright.
48716. The lines are narrow.
48737. ξ Geminorum.
- 48766.7. Bu. 3587. P. A. $256^{\circ}.2$, Dist. $5^{\circ}.16$, combined magn. 5.55. The spectrum of each star is probably F5, since no decided peculiarity is noted. Chart plates taken with the 16-inch Metcalf Telescope show the image elongated, but the two components are not separated.
48781. ψ^6 Aurigae.
48867. The observation, F5, on I 38196, residual 13, was rejected. The spectrum is very faint and indistinct on that plate.
48912. X Geminorum. Variable. Class II. Max. 8. Min. 13. Period, 262^d. On a photograph taken January 4, 1905, the spectrum is of Class Mb, having $H\gamma$ and $H\delta$ equally bright.
48915. α Canis Majoris. Parallax, $0^{\circ}.376$. Proper motion, $1^{\circ}.31$, $203^{\circ}.8$. Typical star of Class A0. See page 7.
48917. The line $H\beta$ is bright, with diffuse dark edges. $H\alpha$ also is bright.
- 48953.4. The spectrum is composite.
49023. The star $-20^{\circ} 1542$, ptm. magn. 9.6, precedes $0^{\circ}.1$, south $2^{\circ}.6$. The spectrum is partly superposed and appears to be of Class A.
49244. The star $+8^{\circ} 1499$, ptm. magn. 8.8, precedes $0^{\circ}.8$, south $1^{\circ}.0$. $H\gamma$ and $H\delta$ of the latter star are seen to be superposed on the spectrum of H. D. 49244.
49247. This star follows $+0^{\circ} 1600$, about 6° . The spectrum was photographed on a plate stained with pinacyanol. It is very faint, but appears to consist almost wholly of red light.
49520. ψ^7 Aurigae.
49591. χ Puppis. Read $0,10 R$, for $0,R$.
- 49618.9. The spectrum is composite. Bu. 3625. P. A. $76^{\circ}.7$, Dist. $0^{\circ}.44$, magn. 5.9 and 7.1.
- 49635.6. The spectrum is composite.
49717. The star $-8^{\circ} 1569$, ptm. magn. 9.8, precedes $0^{\circ}.8$, north $1^{\circ}.1$. The lines $H\delta$, $H\gamma$, and $H\delta$ of this spectrum are superposed upon that of H. D. 49717.
49763. The classification was difficult.
49708. The ζ Puppis series of lines is very strong.
49868. This star is C. P. D. $-24^{\circ} 1686$, and is not contained in the Cordoba Durchmusterung.
49878. The observation, G5, on I 37343, residual 10, was rejected. The spectrum is too dense on that plate.
49891. The star $-23^{\circ} 4436$, ptm. magn. 10.2, precedes $3^{\circ}.1$, north $0^{\circ}.2$. The spectrum is superposed and is of Class A.
49908. δ Geminorum. Read $0,10 R$, for $0,R$.
49933. Parallax, $0^{\circ}.256$.
49976. The lines 4128.1 and 4131.1 are strong.
49992. The lines are indistinct.
50003. The lines are somewhat narrow.
50013. κ Canis Majoris. The lines $H\delta$, $H\gamma$, $H\delta$, and $H\epsilon$ are bright. H.A. 28, 178, Remark 48. Read $1,10 R$, for $1,R$.
50019. θ Geminorum. Read $0,10 R$, for $0,R$.
50058. The hydrogen lines appear narrow, and several narrow solar lines of well marked intensity are seen.
50064. Perhaps of Class Oe5.
50083. $H\beta$ is bright.
50133. — Orionis. Variable. Class III. Max. 8.7. Min. 9.4. Period, irregular.
50186. The line 4077.9, and several other metallic lines are strong.
50204. ψ^8 Aurigae.
50210. The star $-7^{\circ} 1604$, ptm. magn. 9.7, follows $2^{\circ}.4$. The spectrum is superposed and is probably also of Class A.
50234. Bu. 3672. AB, and C. P. A. $161^{\circ}.0$, Dist. $8^{\circ} \pm$. The lines are very broad, and almost double. The spectra are probably alike or nearly alike.
50241. α Pictoris.

50243. A star about 0.4 magn. fainter than this star, follows 3° , north $0^{\circ}.8$. The spectrum is superposed and may be of Class G.
50281. Parallax, $0''.122$.
50310. τ Puppis.
50312. The star $-62^{\circ} 712$, magn. 9.0, precedes $3^{\circ}.0$, south $0^{\circ}.1$. The spectrum is superposed and is probably of Class A5.
50320. The lines are somewhat narrow.
50337. A Carinae. Read $5,10 \text{ \AA}$, for $5,2$.
50436. — Monocerotis. Variable. Class III. Max. 9.2. Min. 10.4. Period, irregular.
50479. Variability suspected between the magnitudes 8.0 and 8.6.
50480. Nova Geminorum, No. 2. A description of the spectrum and its remarkable changes is given in H. C. 176, and H.A. 76, 24, 36. On March 13, 1912, two days after the appearance of the Nova, the spectrum was of Class F5, and the magnitude was 4.0. On March 17, when the magnitude was 5.3 the spectrum had become that of a typical Nova, bright bands appearing on the edges of all the dark bands. On May 10, 1912, when the magnitude was 7.3, the nebular bands 4363 and 5007 were present.
50506. ζ Mensae.
50522. This star was probably incorrectly identified in H.A. 28, 112, where the spectrum is given XVa.
50635. ϵ Geminorum.
50658. ψ° Aurigae.
50696. The dark lines are very faint. Perhaps of Class Oes.
- 50703.4. H. D. 50703 precedes $2^{\circ}.23$, south $3^{\circ}.2$.
50711. Read $0,10$, for $0,2$.
50715. The star, $-56^{\circ} 1180$, ptm. magn. 8.9, precedes $2^{\circ}.0$, north $0^{\circ}.2$. The spectrum is superposed and is probably also of Class G.
- 50730.1. The spectrum is composite.
50737. Probably of Class B0.
50778. θ Canis Majoris.
50850. The lines are narrow, and the spectrum resembles that of β Orionis.
50853. Read $0,10$, for $0,2$.
50877. α^1 Canis Majoris. The spectrum is peculiar in combining characteristics of Classes G5 and K2. The lines $H\gamma$ and 4226.9 are of the same intensity as in Class G5, while the general distribution of light in the spectrum resembles that of Class K2.
50896. A typical star of Class Ob. The spectrum is described in detail in H.A. 28, 147.
50937. The lines $H\gamma$ and $H\delta$ are double. This is due to a star about 0.8 magn. fainter than H. D. 50937, in the same approximate right ascension, and south $0^{\circ}.6$. The spectrum of this star is probably of Class A.
50949. UW Aurigae. Variable. Max. 9.6. Min. 12.6. Class and period unknown.
50973. ψ° Aurigae. Read $2,10 \text{ \AA}$, for $2,2$.
- 50976.7. H. D. 50976 follows $0^{\circ}.3$, north $0^{\circ}.6$. The two stars are of nearly equal brightness on chart photographs. The spectra are probably somewhat alike.
51001. The spectrum may be intermediate between Classes K5 and Ma.
51005. The star $+5^{\circ} 1474$, ptm. magn. 9.9, precedes $0^{\circ}.0$, north $0^{\circ}.8$. The spectrum is not seen on I 36977, nor on photographs taken with shorter dispersion. This star is at least 0.8 magn. fainter than H. D. 51005 on chart photographs.
51035. This star is C. P. D. $-24^{\circ} 1753$, and is not contained in the Cordoba Durchmusterung.
51189. Y Monocerotis. Variable. Class II. Max. 8.0. Min. 13.5. Period, 229^d.3. On a photograph taken March 8, 1910, the spectrum is of Class Mb, having $H\delta$ twice as bright as $H\gamma$.
51199. π Canis Majoris.
- 51250.1. μ Canis Majoris. The spectrum is composite. Bu. 3725. P. A. $334^{\circ}.5$, Dist. $2''.32$, magnitudes 5.4 and 8.5. The photometric and photographic magnitudes and intensity refer to the combined light.
51309. ι Canis Majoris. Read $3,10 \text{ \AA}$, for $3,2$.
51335. This spectrum was classified Fo on I 38069, but the line assumed to be K, is in reality the line $H\gamma$ of H. D. 51360.
51395. Perhaps of Class K5.
- 51424.5. The spectrum is composite. Read $0,10 \text{ \AA}$, for $0,2$.
51478. X Monocerotis. Variable. Class III. Max. 8.0. Min. 10.0. Period, irregular. On a photograph taken January 28, 1897, the spectrum is of Class Mb, having $H\gamma$ and $H\delta$ equally bright. The nature of the light curve, which is distinctly irregular, is anomalous for an object having a spectrum of Class M with bright hydrogen lines.
51480. The line $H\delta$ is bright, and bright lines or spaces not due to hydrogen are seen. The lines are narrow and the line K is as strong as in Class A2.
51550. X Canis Majoris. Variable. Class III. Max. 8.9. Min. 10.1. Period, irregular.
51557. ι Volantis.
51560. H. D. 51582 follows $1^{\circ}.6$, north $0^{\circ}.3$. The two spectra are superposed. The lines in the spectrum of H. D. 51560 are very indistinct. The spectrum may belong to Class B5.
- 51565.6. The spectrum is composite. Line 4077.9 is strong and numerous other fine lines are seen which belong to a spectrum of Class G. It was classified A2p on I 37652.
51585. The lines $H\beta$, $H\gamma$, and $H\delta$ are bright. The spectrum may be of "The P Cygni Type." See H.A. 76, 31.
51610. R Lyncis. Variable. Class II. Max. 7.0. Min. 13.8. Period, 379^d.2. The spectrum does not appear to be of Class M, but to resemble that of R Andromedae, H. D. 1967. The lines $H\beta$, $H\gamma$, and $H\delta$ are bright. On photographs taken November 27, 1905 and December 12, 1907, the line $H\gamma$ was the strongest bright line. $H\beta$ and $H\delta$ were respectively, 0.4 and 0.1 as strong as $H\gamma$.
51620. RV Monocerotis. Variable. Class III. Max. 7.0. Min. 8.2. Period, irregular.
51629. The lines appear to be broad.
51631. The star $-24^{\circ} 4638$, ptm. magn. 10.2, precedes $1^{\circ}.8$, south $1^{\circ}.4$. The spectrum is superposed and appears to be of Class G. The star $-24^{\circ} 4641$, ptm. magn. 10.7, follows $1^{\circ}.3$, south $3^{\circ}.4$. The spectrum is superposed and appears to be of Class A. Owing to the superposition of

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- these spectra, the class of spectrum of H. D. 51631 is very uncertain.
51634. The declination is given according to the Cape Photographic Durchmusterung. It is assumed that the minutes of declination in the Cordoba Durchmusterung should read 19 instead of 29.
51647. The lines are broad.
51662. The star $+48^{\circ} 1466$, ptm. magn. 9.2, follows $5^{\circ}.4$, south $13'.7$. The spectrum is partly superposed and appears to be of Class A.
- 51689,90. H. D. 51689 follows $0^{\circ}.5$, north $0'.2$. Both stars may have spectra of Class G.
51710. The spectrum is on the extreme edge of the second plate.
51723. The lines are narrow.
52006. The observation, Fo, on I 36977, residual 7, was rejected. The spectrum is very faint on that plate.
52089. ϵ Canis Majoris. The lines are narrow. See H.A. 28, 177, Remark 39, for notes on certain lines in the spectrum.
52092. t Puppis.
52140. The line K is rather strong for this class.
52181. The line 4077.9 is strong.
52225. The spectrum was photographed with the 24-inch Reflector on a plate stained with pinacyanol. It shows only red light and resembles that of VX Andromedae, H. D. 1546.
52244. The line K is strong for this class.
52245. Line 4077.9 is somewhat stronger than normal.
52334. A star about 0.6 magn. fainter than H. D. 52334 precedes $2'$, north $0'.4$. The spectrum is probably also of Class G.
52382. The lines appear to be narrow. The observation, B8, on I 38069, residual 8, was rejected. The spectrum is near the edge of that plate.
52387. The star $-14^{\circ} 1680$, ptm. magn. 10.1, follows $6^{\circ}.0$, north $1'.3$. The spectrum is superposed and appears to be of Class A.
52497. ω Geminorum.
52694. On the second plate, B 24340, the spectrum appears to combine characteristics of Classes F8 and G5. The general distribution of the light resembles that of Class G5, while the hydrogen lines are as strong as in Class F8.
52816. The star, $-30^{\circ} 3796$, ptm. magn. 9.5, precedes $1^{\circ}.5$, south $0'.8$. The spectrum is superposed and appears to be also of Class A.
- 52822,3. The spectrum is composite.
- 52830,1. The spectrum is composite.
52875. The star $-25^{\circ} 3931$, ptm. magn. 10.7, precedes $1^{\circ}.8$, north $0'.5$. The spectrum is superposed and appears to be also of Class A.
52877. σ Canis Majoris.
52891. The star $-9^{\circ} 1808$, ptm. magn. 9.8, precedes $3^{\circ}.7$, north $2'.0$. The superposition of this spectrum makes that of H. D. 52891 uncertain.
52905. T Volantis. Variable. Class II. Max. 9.1. Min. 14.1. Period, unknown. On a photograph taken November 24, 1897, the spectrum is of Class Mb, having the line $H\delta$, 0.8 as bright as $H\gamma$.
52973. ζ Geminorum. Variable. Class IV. Max. 3.7. Min. 4.3. Period, 10^d.15382. The lines are narrow.
53003. $H\delta$ and $H\gamma$ are rather strong for other portions of the spectrum which resemble Class G5.
53058. The star $-8^{\circ} 1713$, ptm. magn. 10.1, follows $2^{\circ}.6$, north $0'.4$. The spectrum is superposed and is probably also of Class A.
53079. In H.A. 56, 79, the combined magnitude of this star and H. D. 53111 is 7.84.
53111. See H. D. 53079.
53120. The lines are broad. This may be due to the superposition of the spectrum of $-8^{\circ} 1716$, ptm. magn. 10.5. The latter star follows $3^{\circ}.6$, north $1'.1$.
53135. The spectrum is hazy and indistinct.
53138. σ^2 Canis Majoris. The lines are very narrow. See H.A. 28, 183, Remark 96, for notes on intensities of certain lines.
53179. The lines $H\delta$ and $H\gamma$ are bright. The dark lines are very faint, but helium lines are certainly present. The line K is very strong for Class B.
53243. The star $-15^{\circ} 1627$, ptm. magn. 10.7, follows $0^{\circ}.8$, south $0'.7$. The spectrum is superposed and is of Class A.
53244. γ Canis Majoris.
53418. The observation, Ko, on I 36977, residual 10, was rejected. The spectrum is very faint and in poor focus on that plate.

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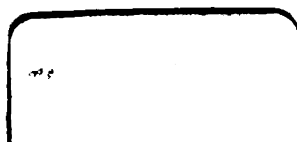
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